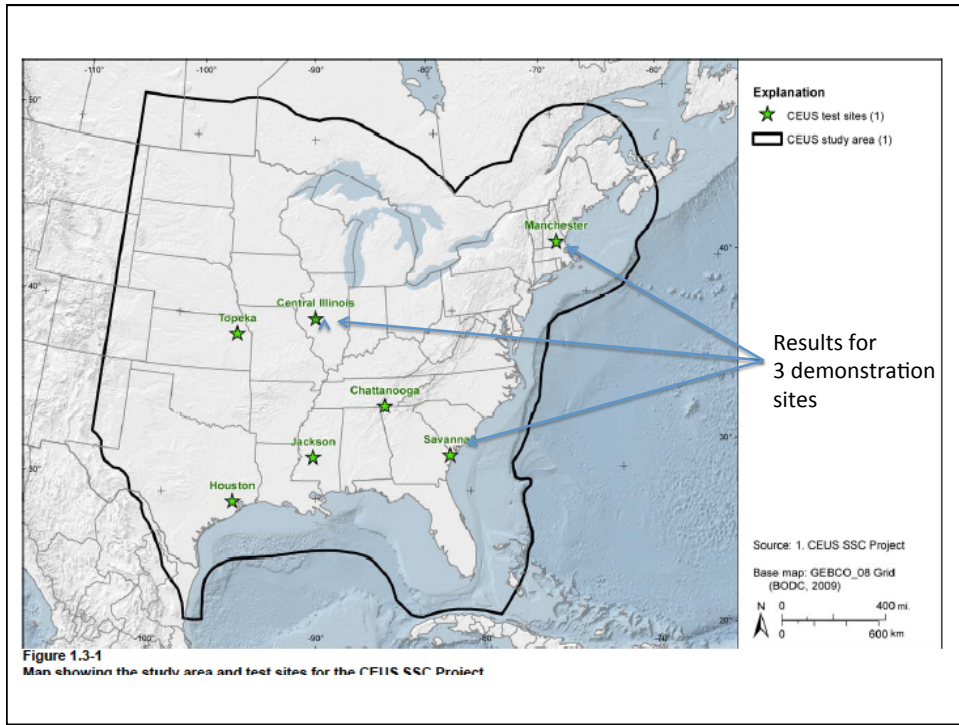


Hazard Sensitivity

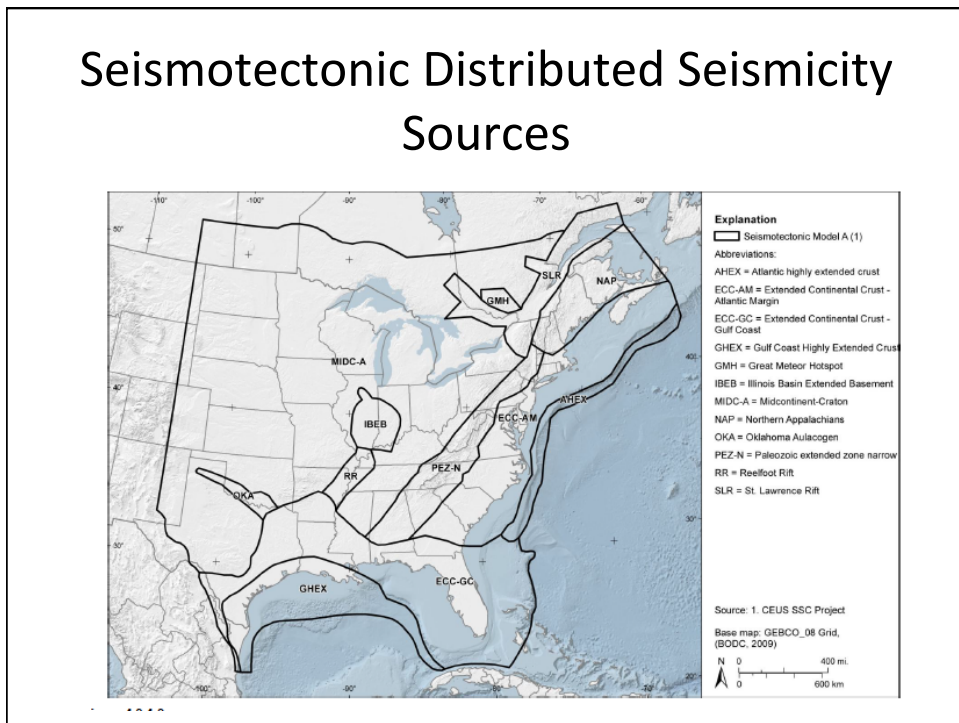
NGA East TI Team
NGA East Workshop 3C
June 18, 2015

Calculation of Hazard

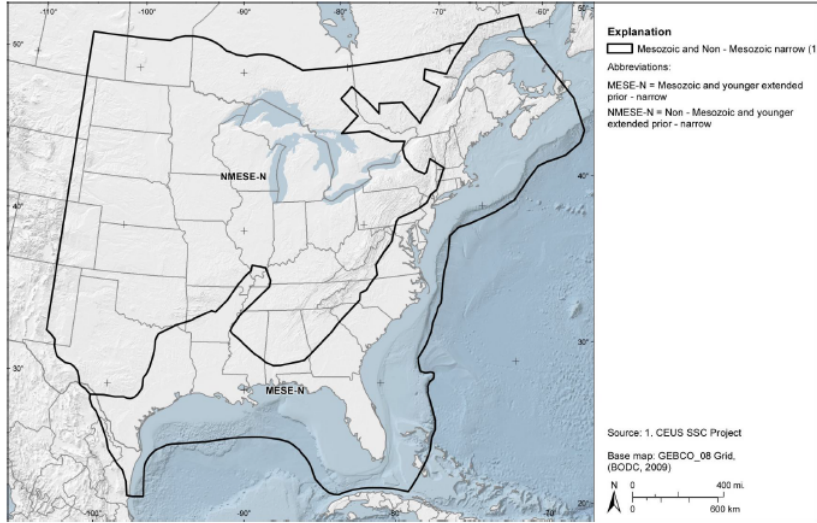
- Develop mean earthquake recurrence rates for all sources
- Compute hazard separately for Distributed Seismicity and RLME sources
- Use central single-station sigma model
- Model ruptures as uniformly distributed in orientation and $2/3$ - $1/3$ mixture of 90 degree and 40 degree dips
- For RJB models include EPRI (2013) small distance additional aleatory variability from rupture depth (weighted 0.4)



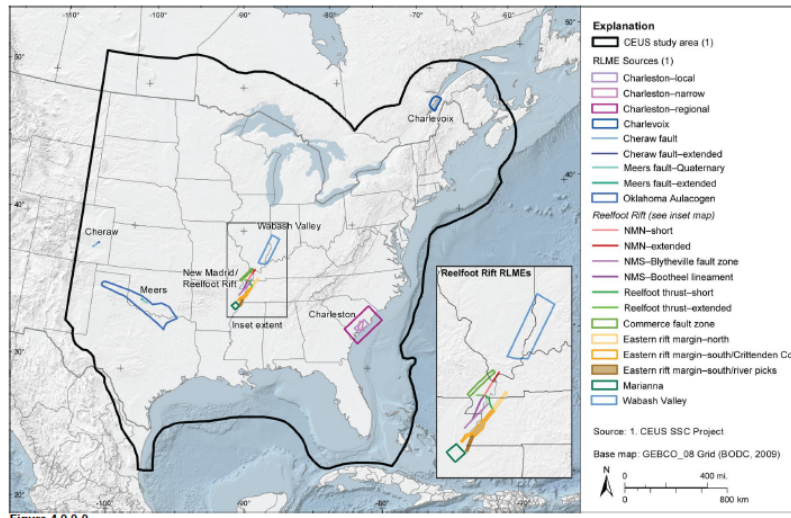
Seismotectonic Distributed Seismicity Sources



Mmax Distributed Seismicity Sources

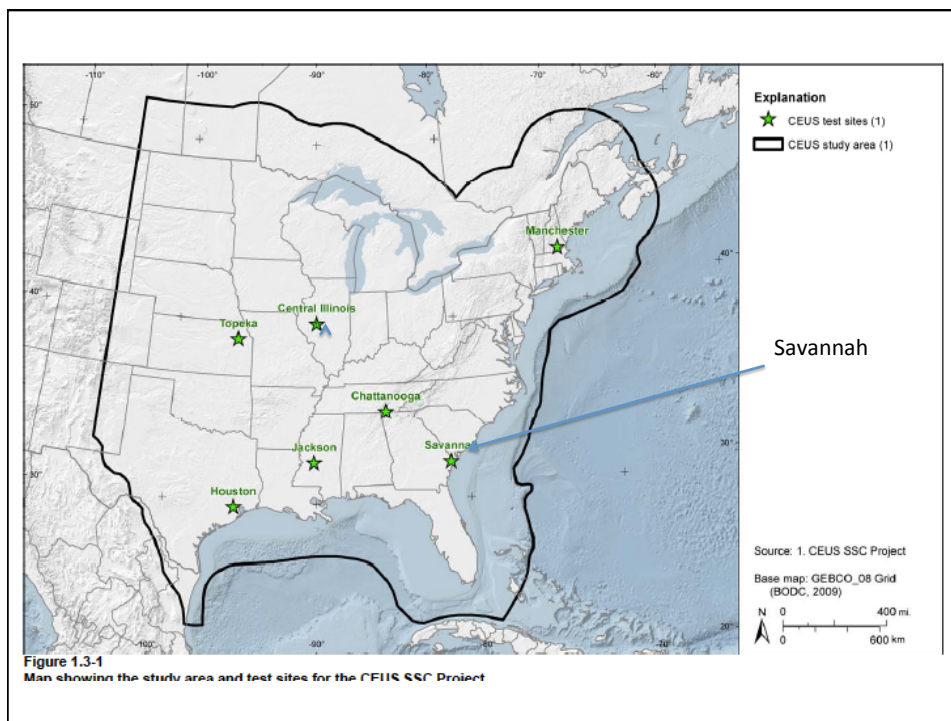


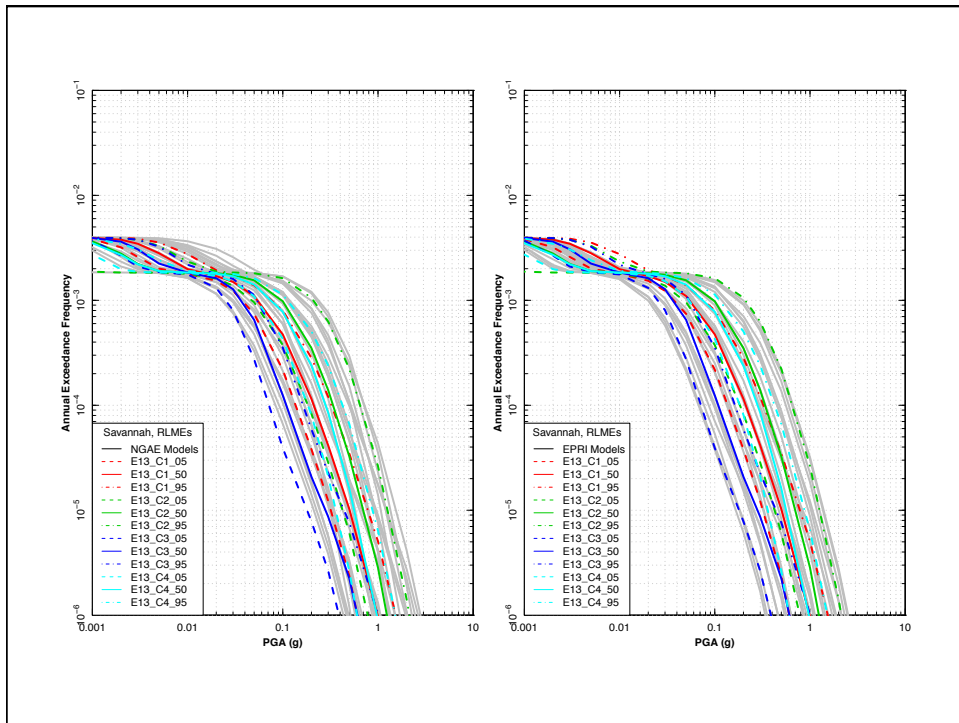
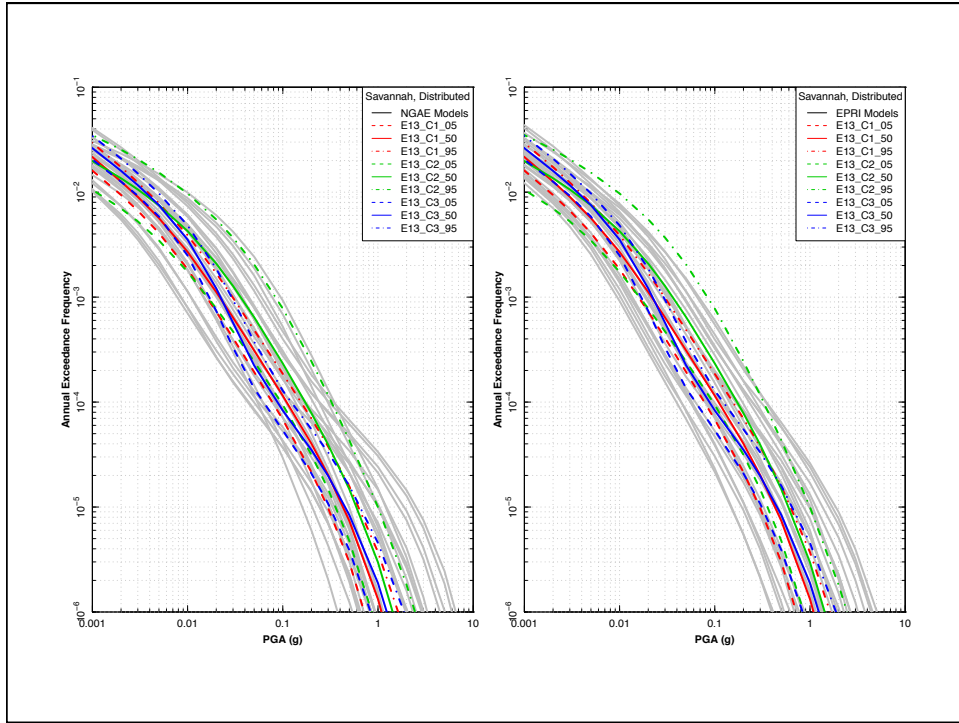
RLME Sources

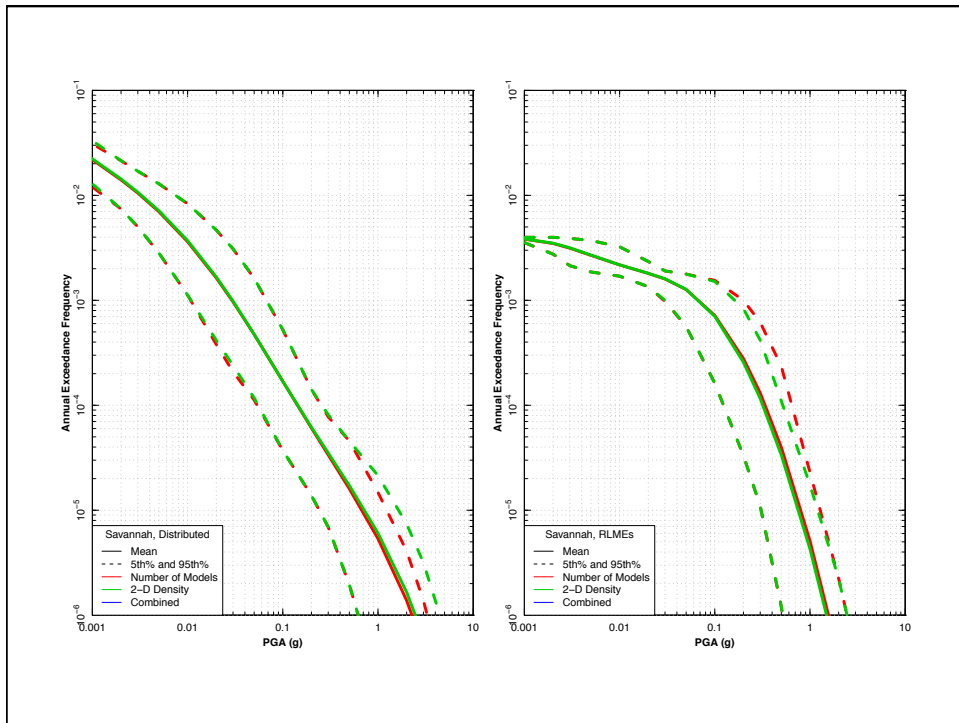
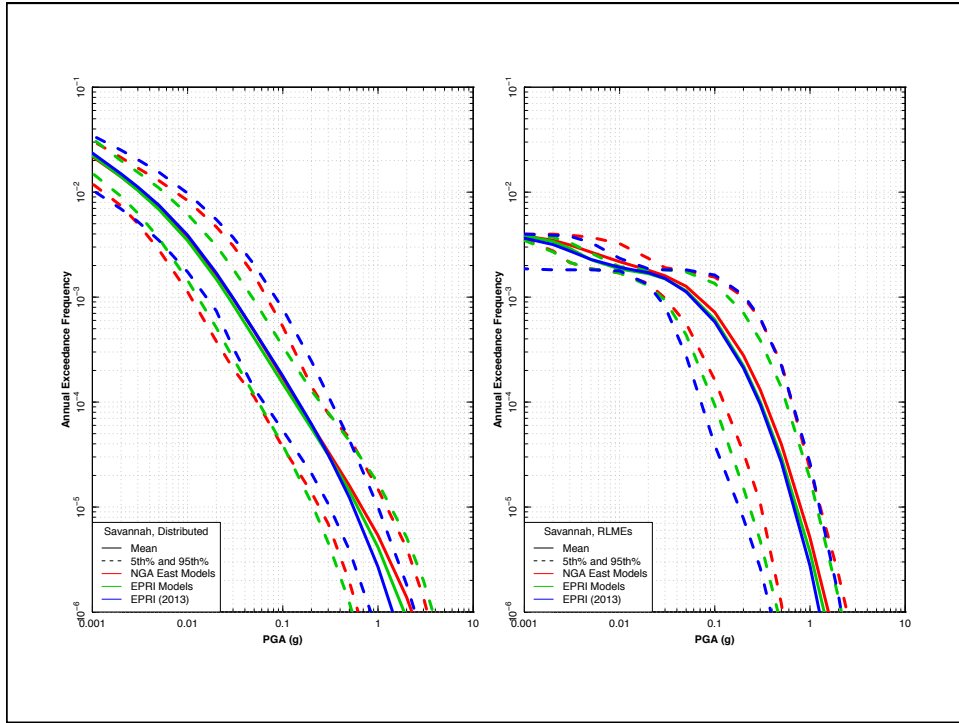


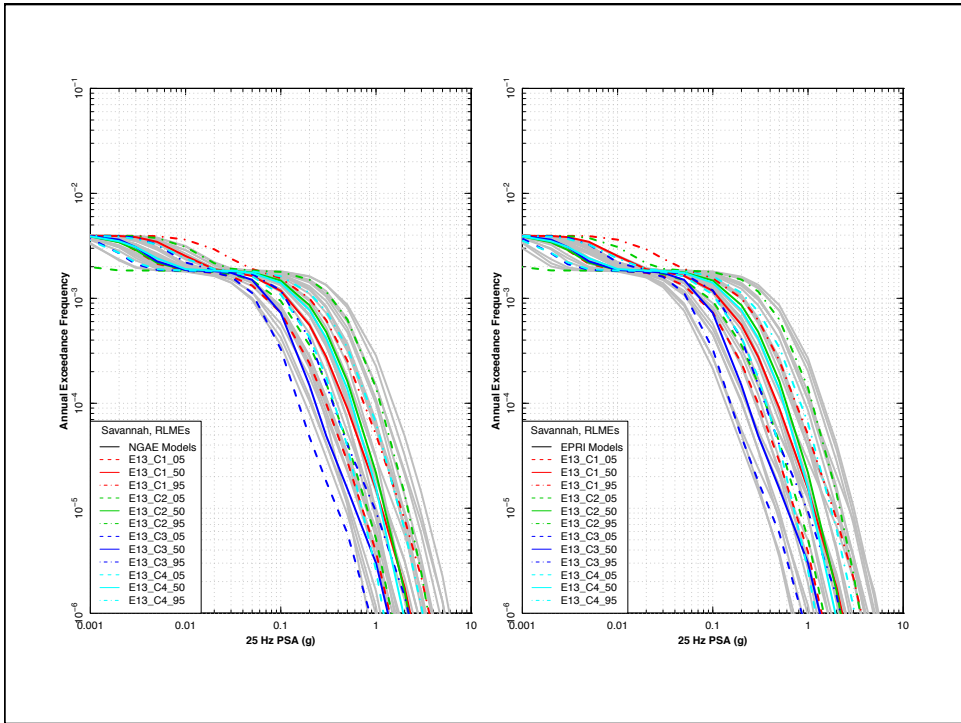
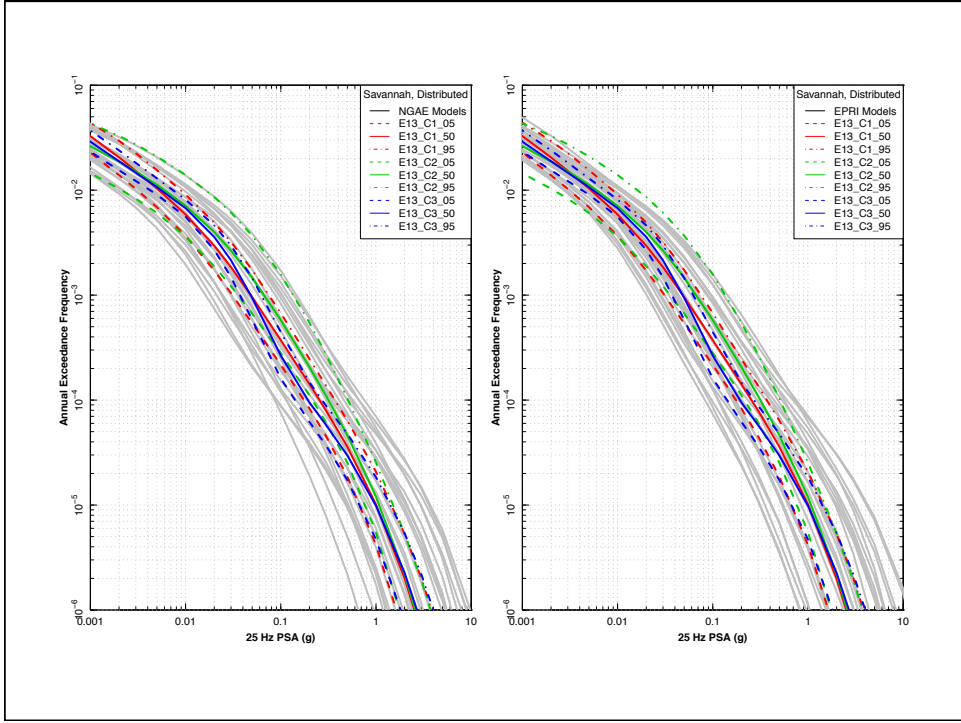
Hazard Sensitivity

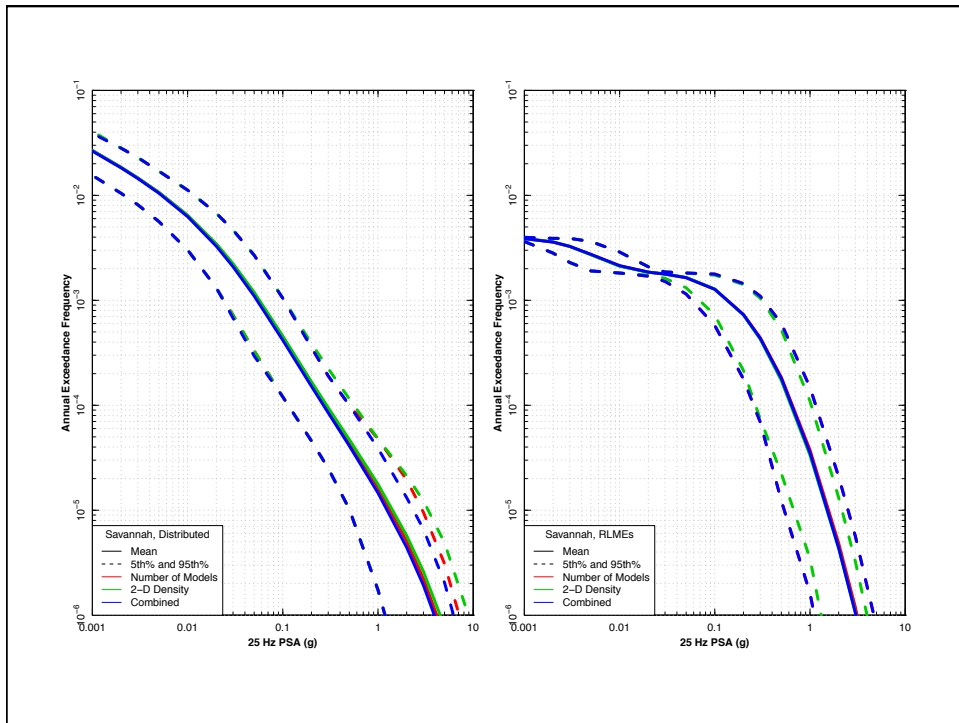
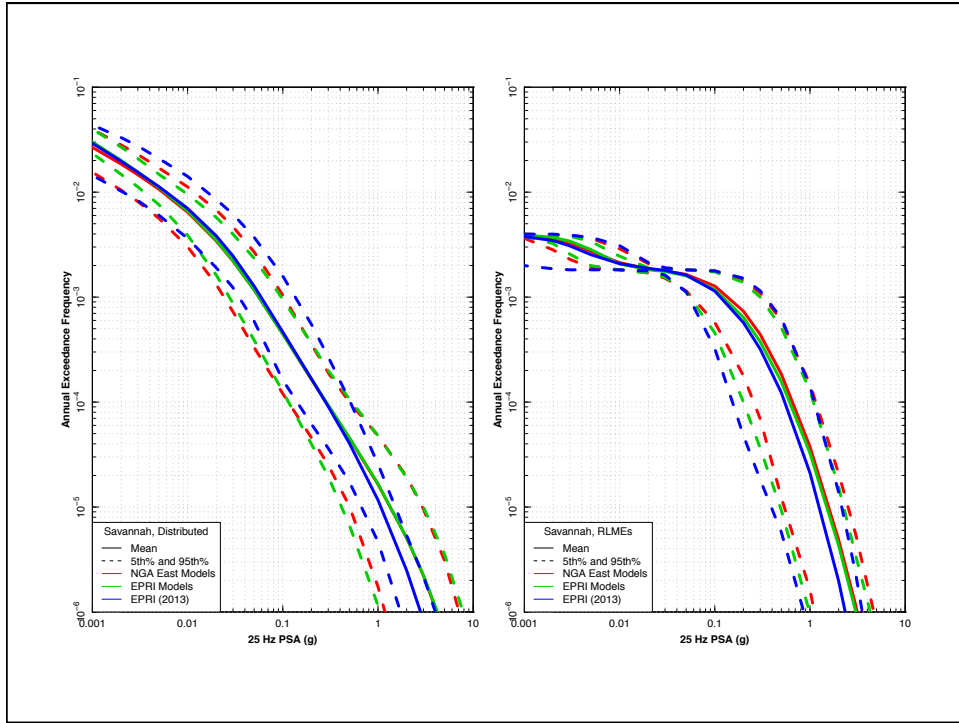
- Results presented for 7 EPRI (2013) frequencies (PGA, 25, 10, 5, 2.5, 1, 0.5 Hz) and 0.2 and 0.1 Hz
- Show 29 curves for distributed and RLME sources for NGAe models and models developed from EPRI (2013) seeds compared to EPRI (2013) models
- Show mean, 5th and 95th percentiles for NGA East and models developed from EPRI (2013) seeds (number of models weights) compared to EPRI (2013)
- Show mean, 5th and 95th percentiles for NGA East for three weights: number of models, 2-D probability density, and combined number of models, residuals, and likelihood (only for frequencies of 25, 10, 5, 2.5, 1, and 0.5 Hz)
- UHRS from mean hazard based on number of models weights

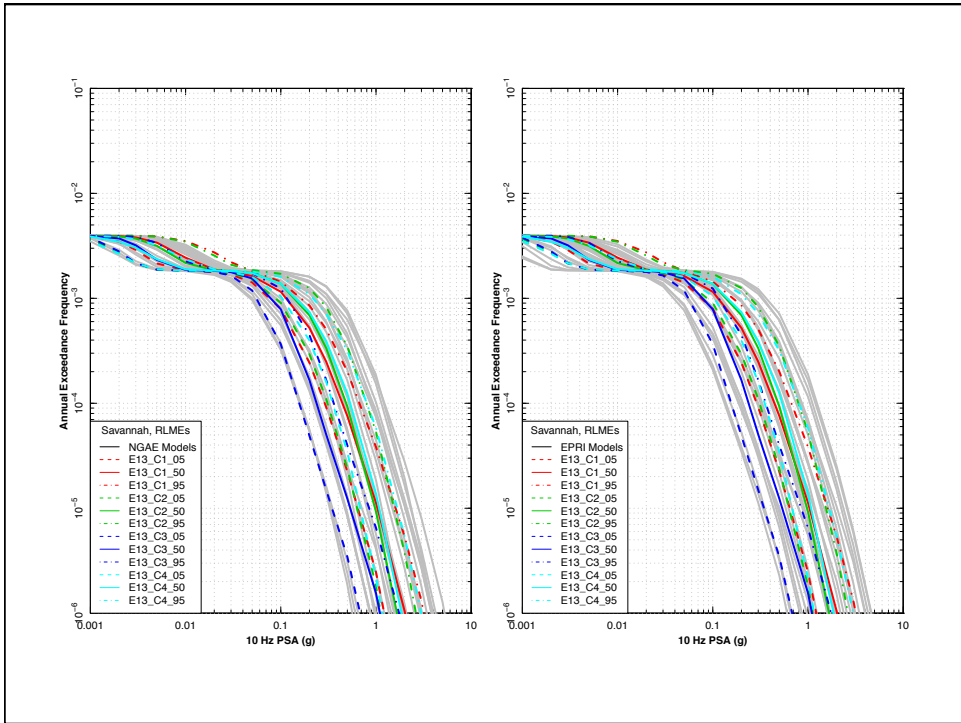
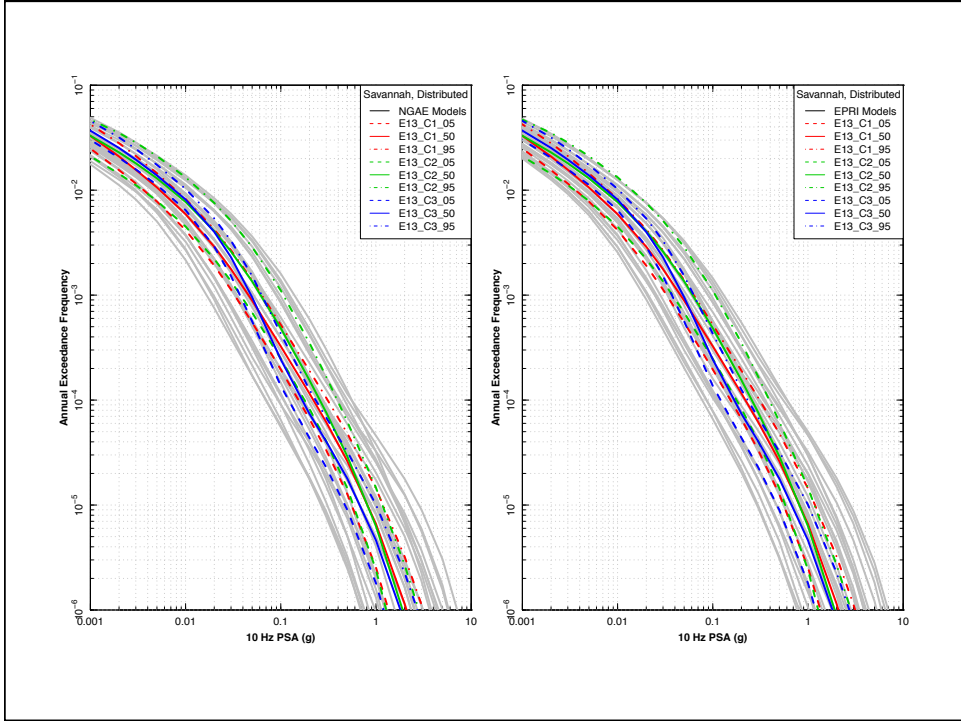


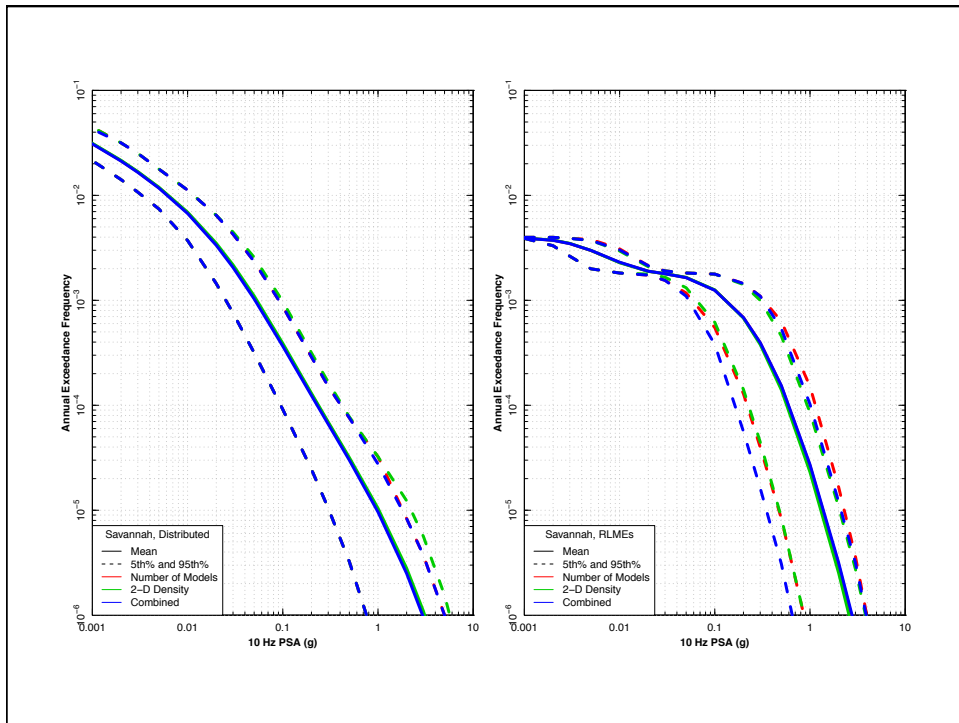
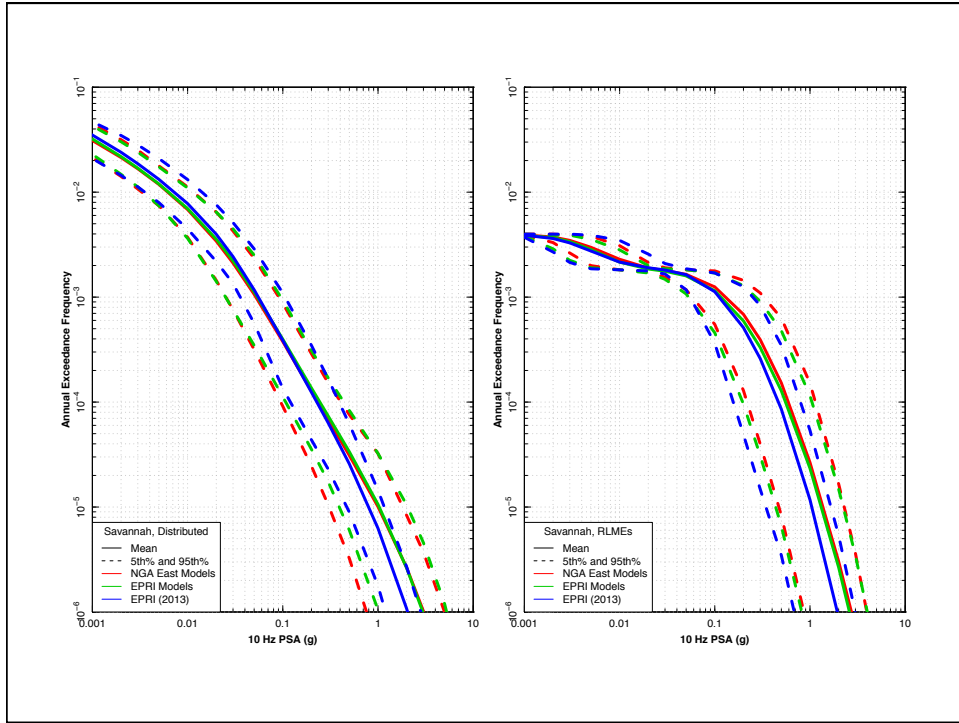


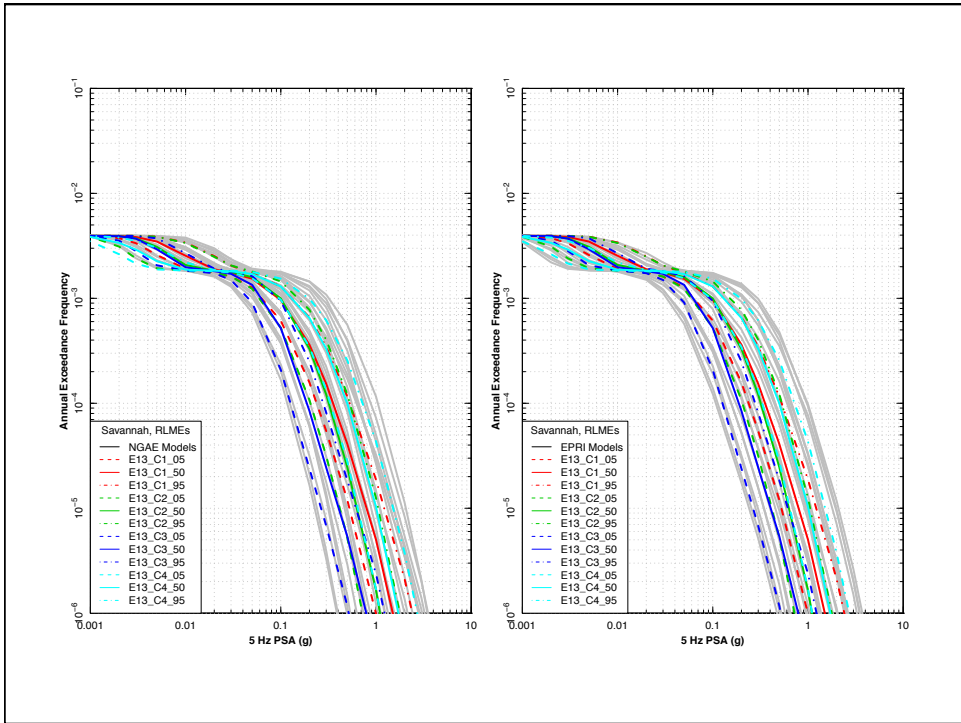
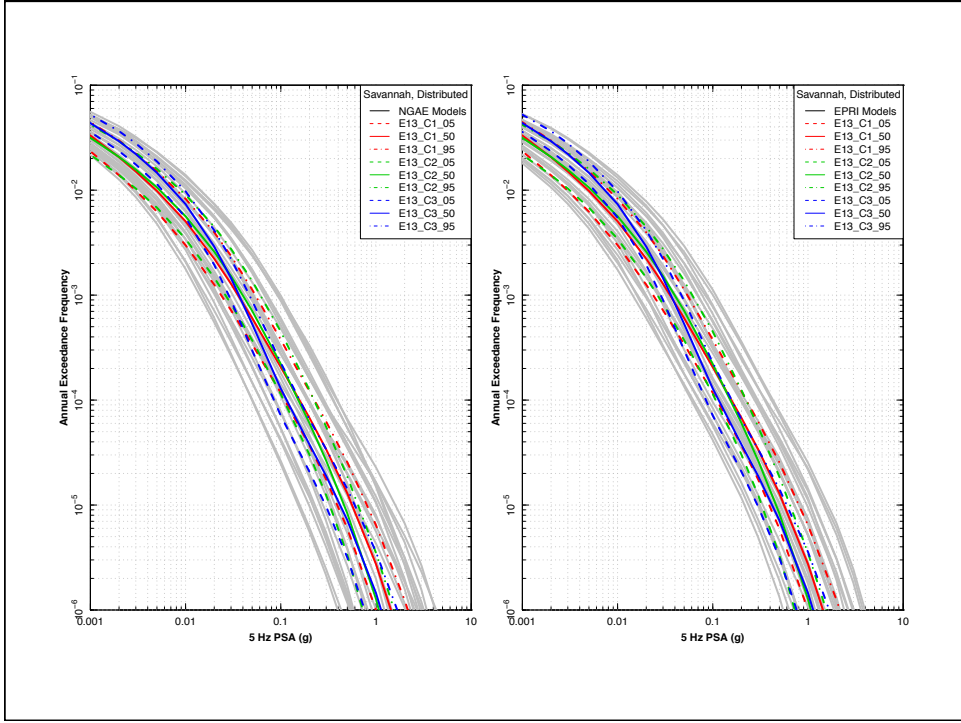


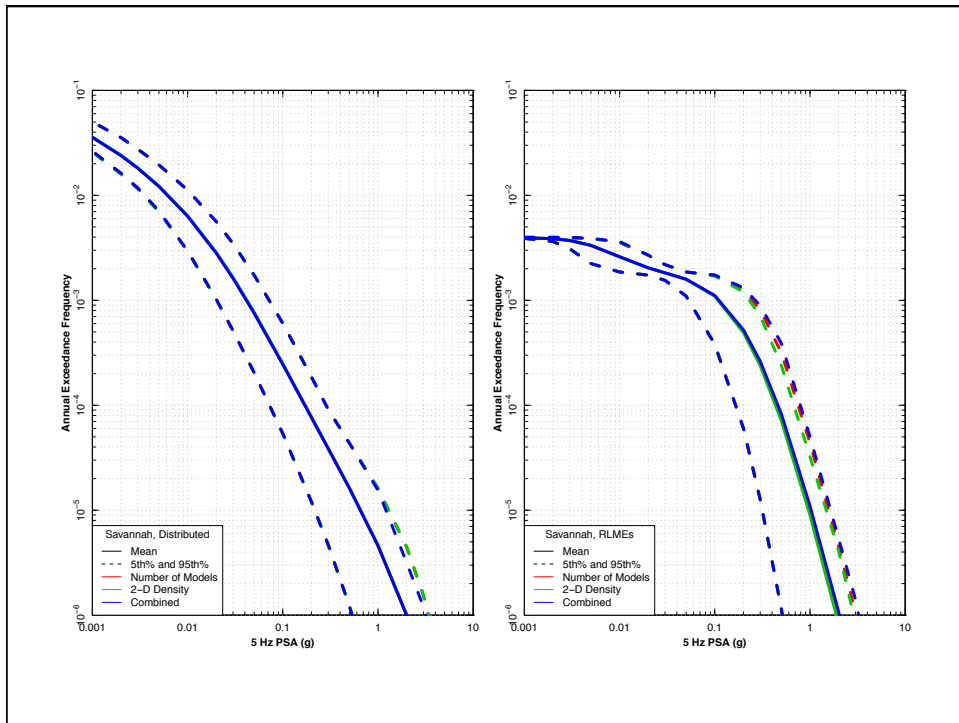
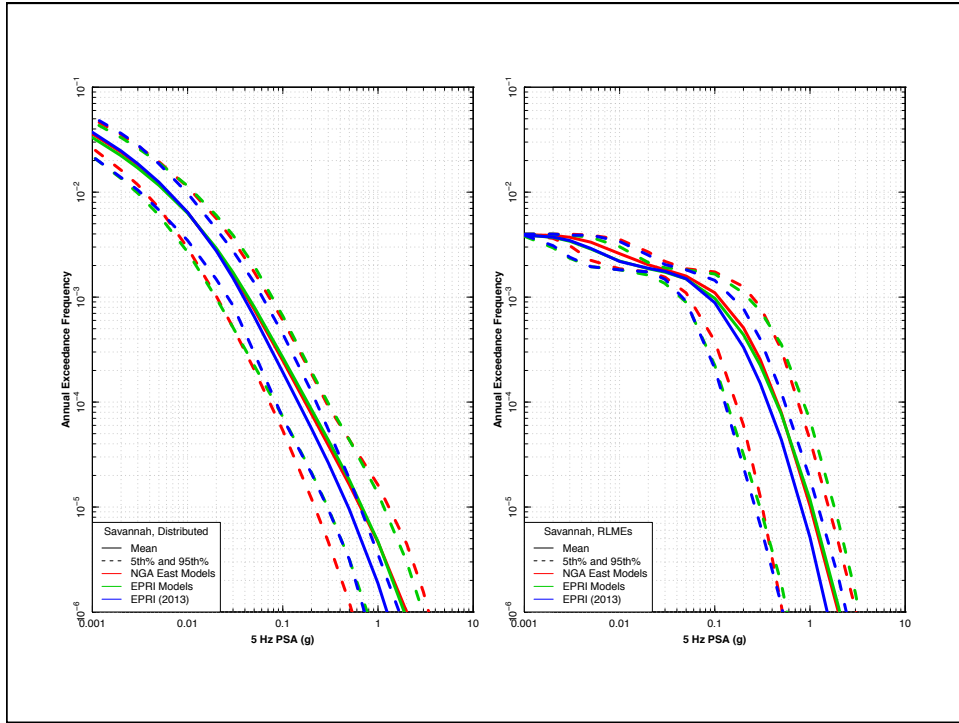


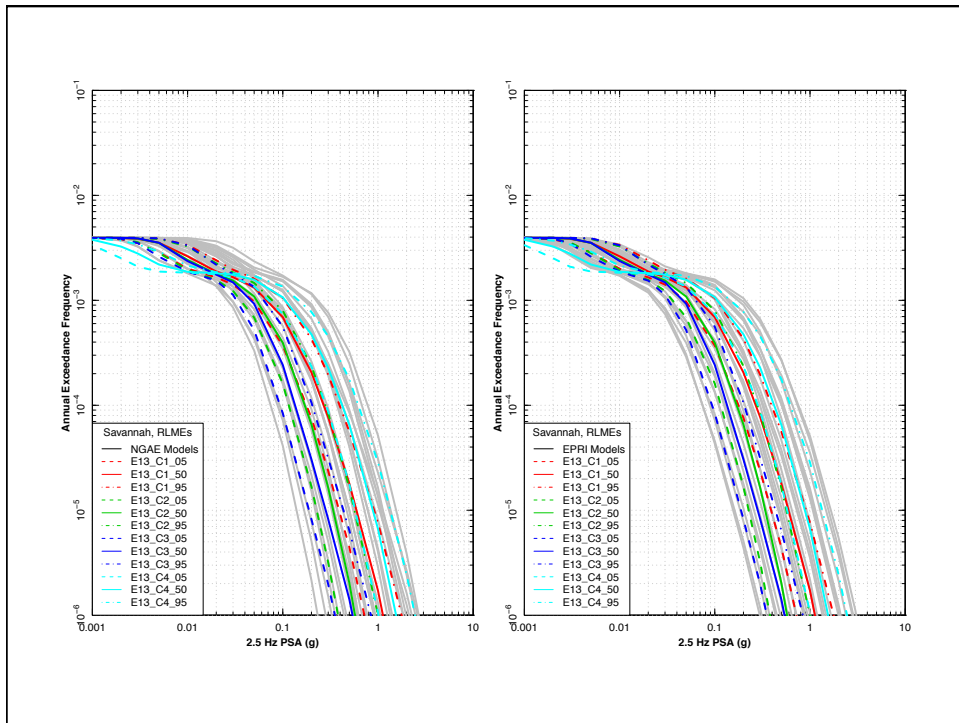
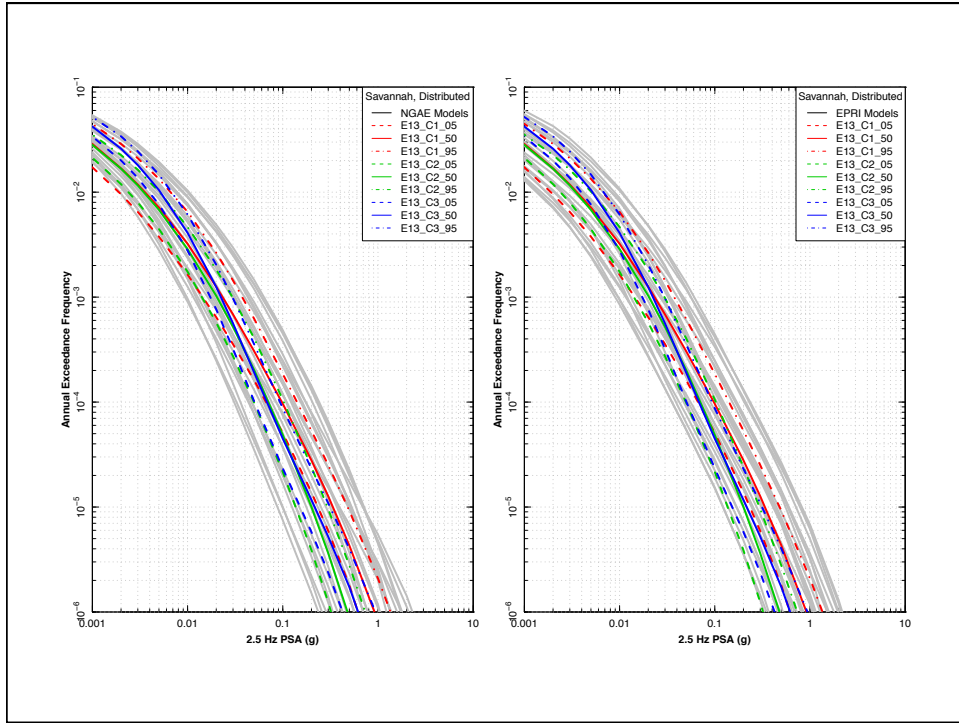


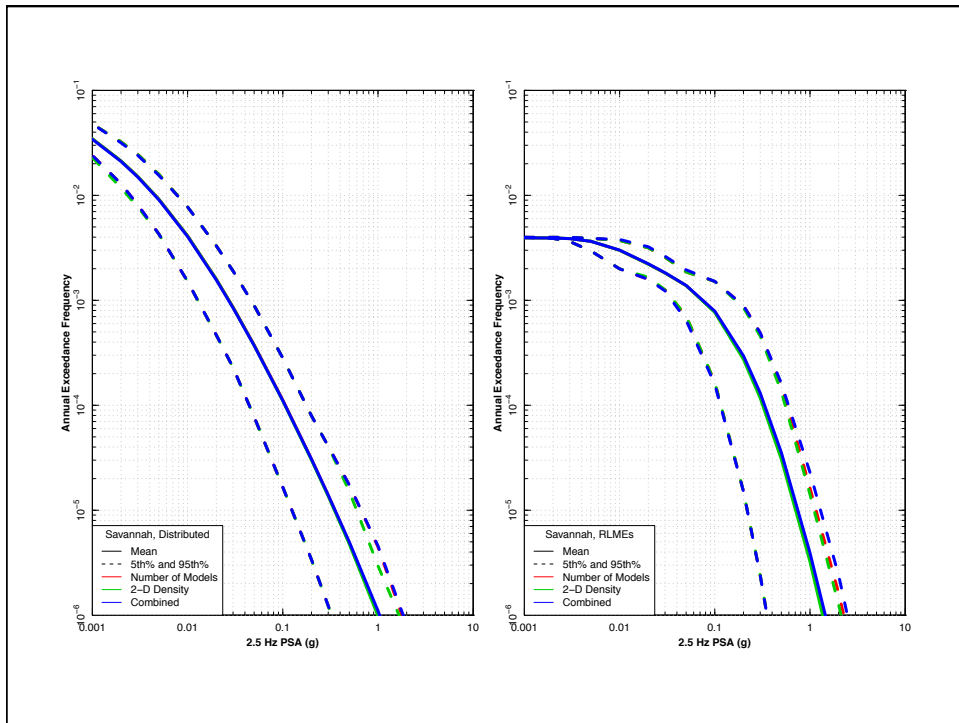
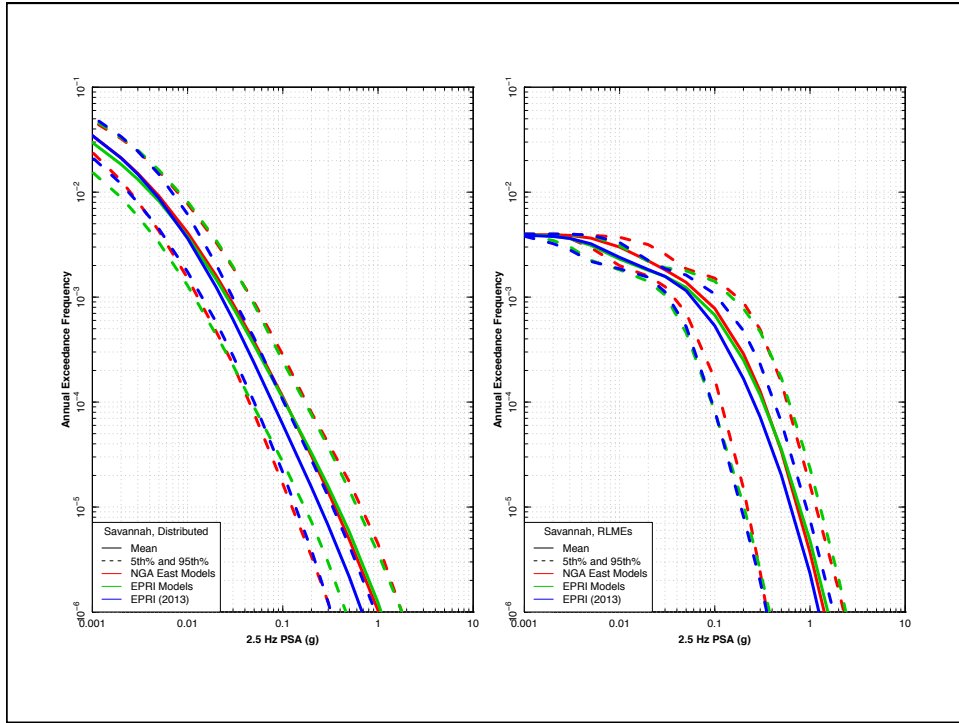


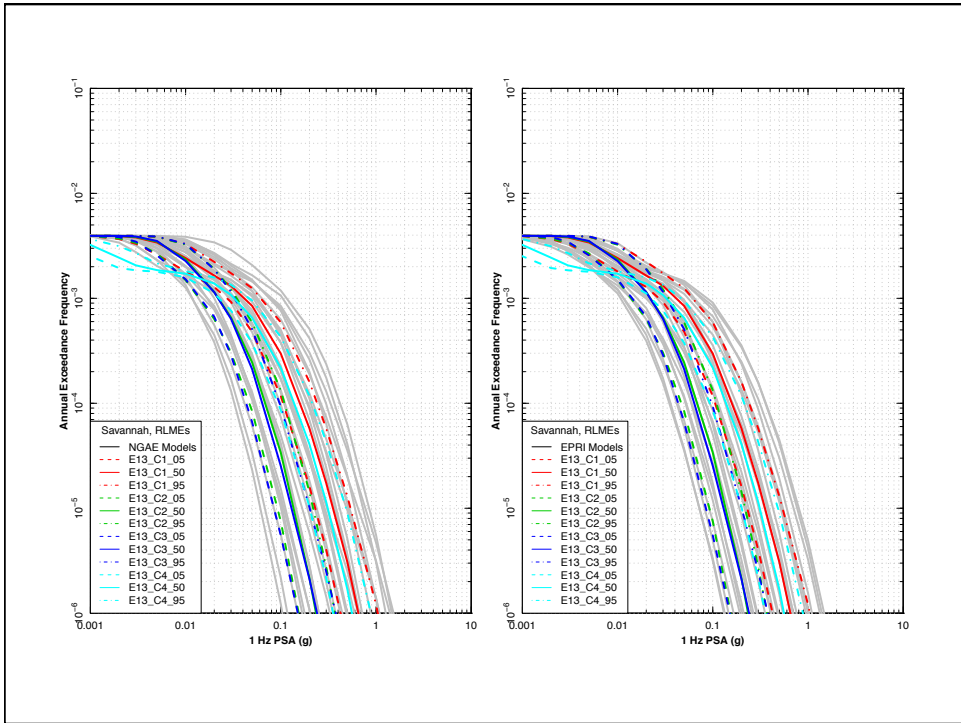
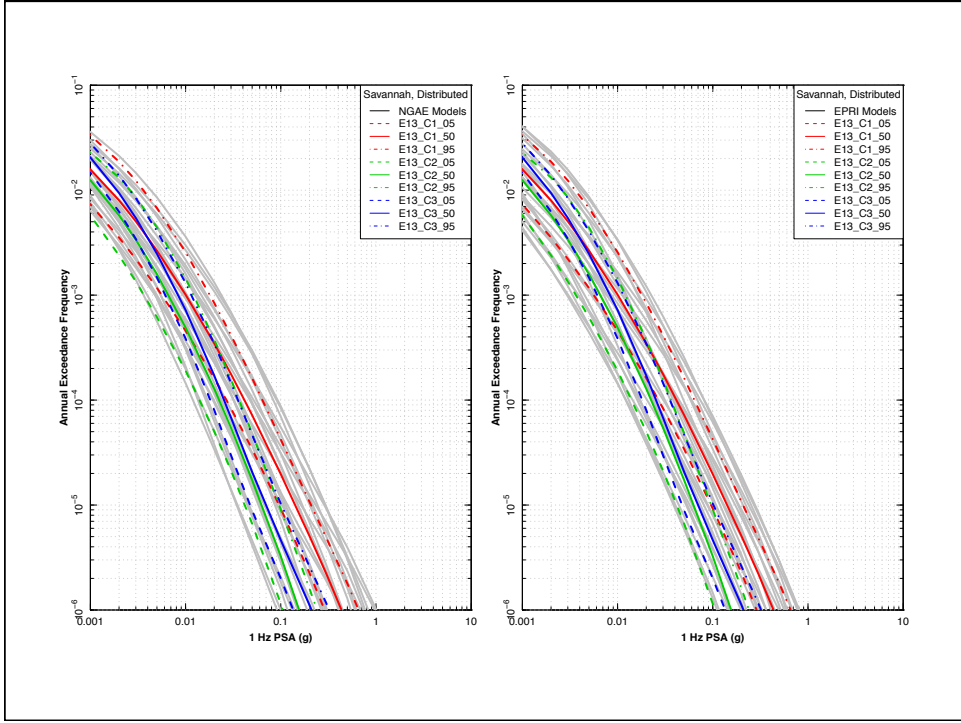


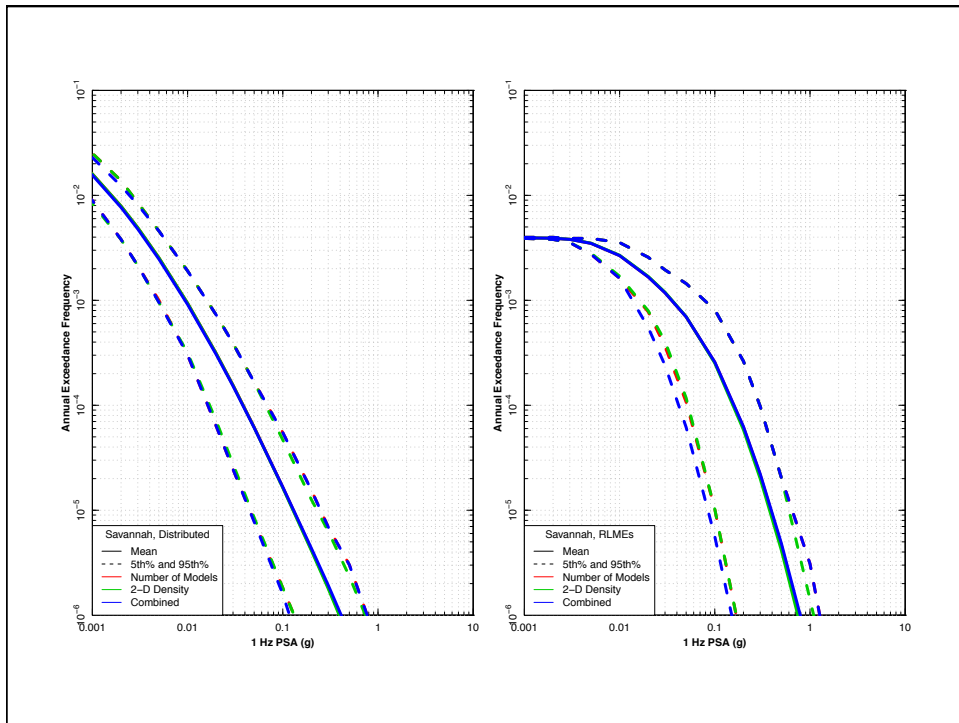
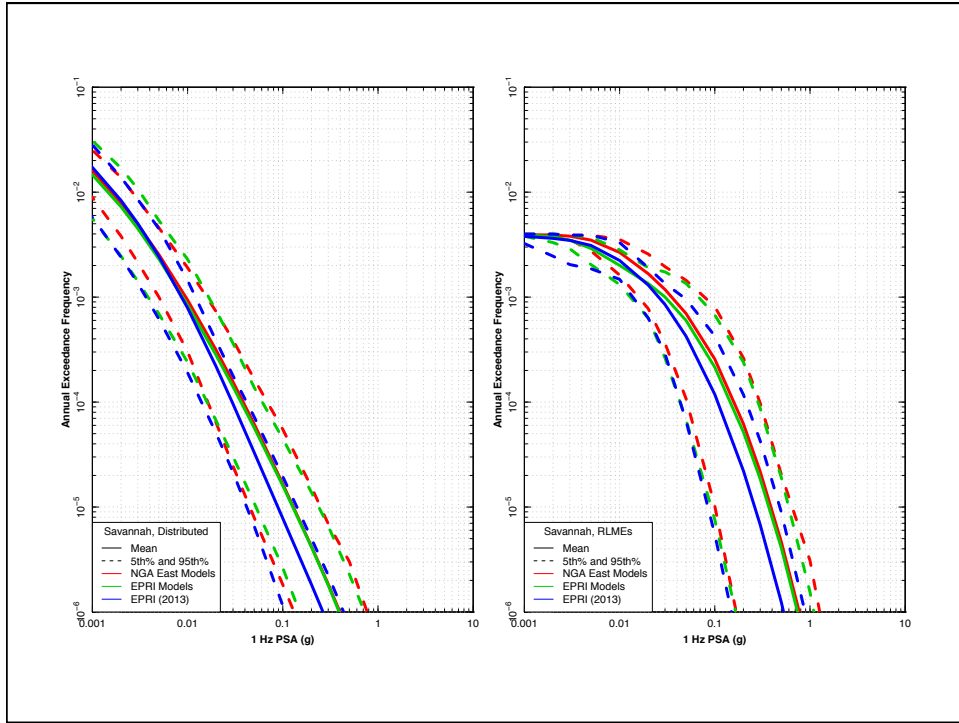


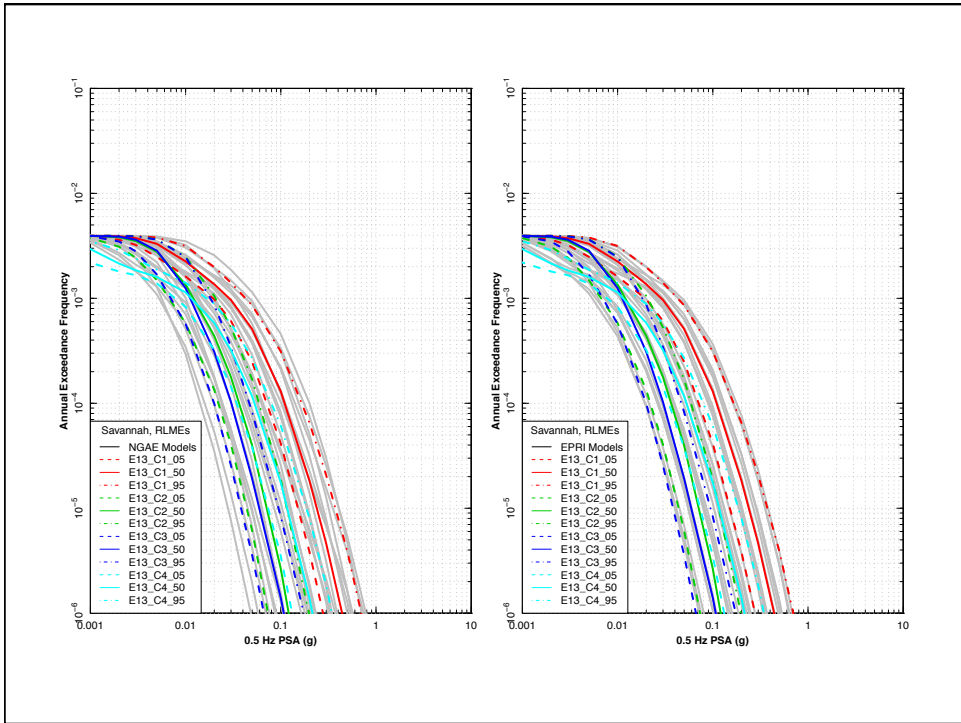
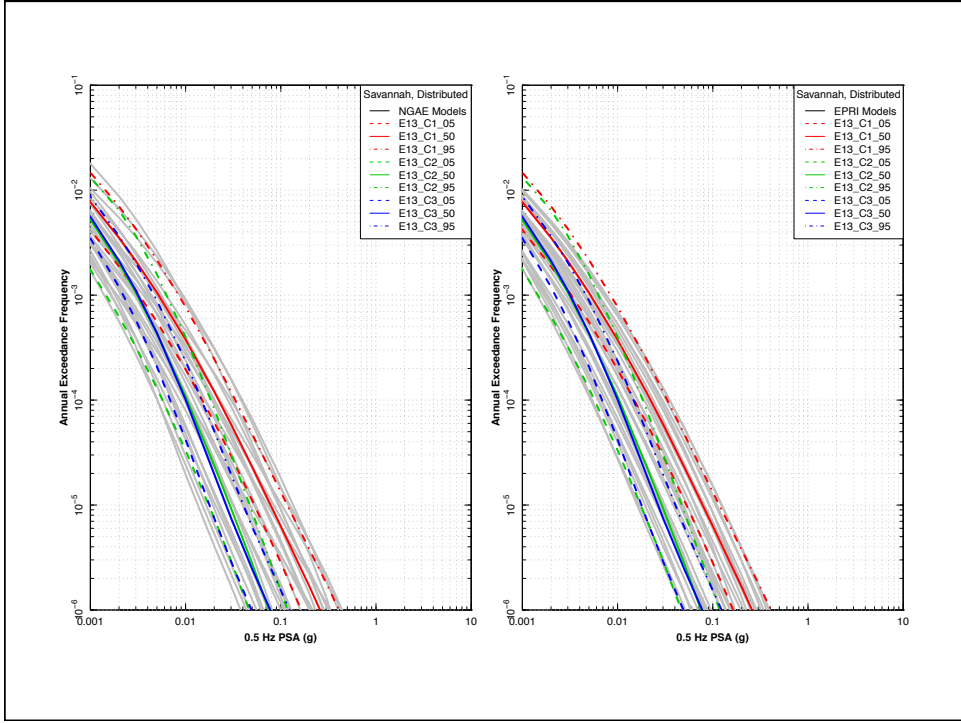


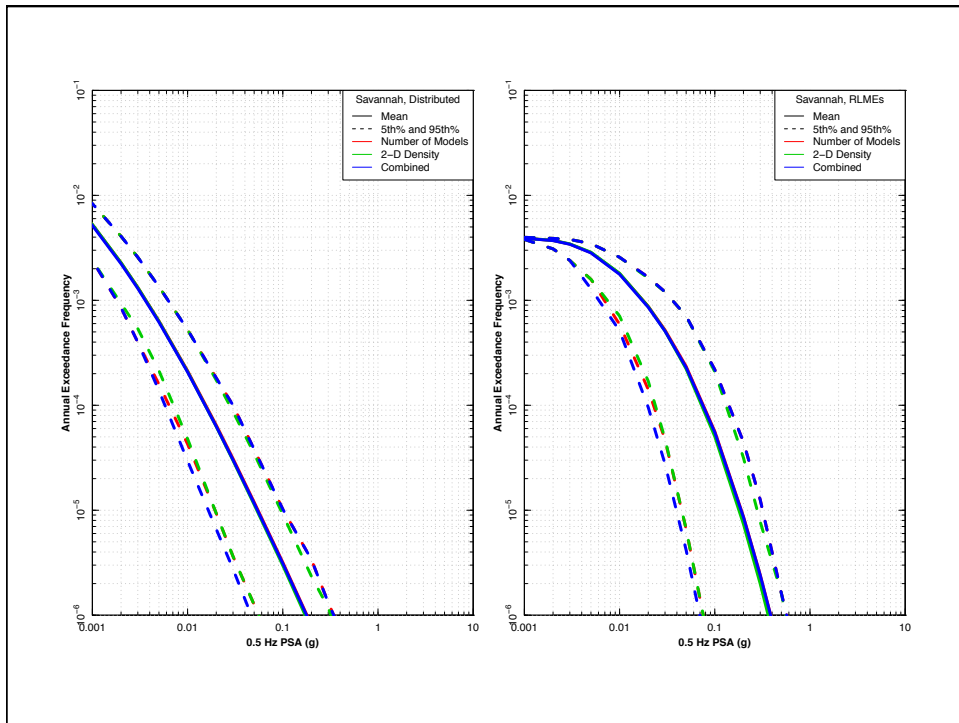
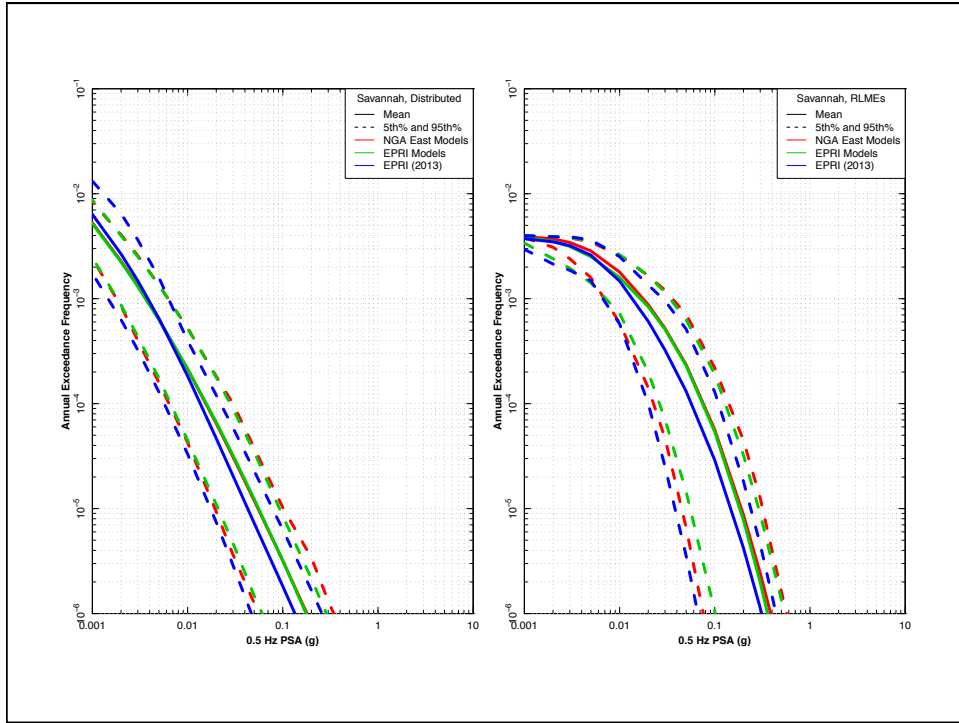


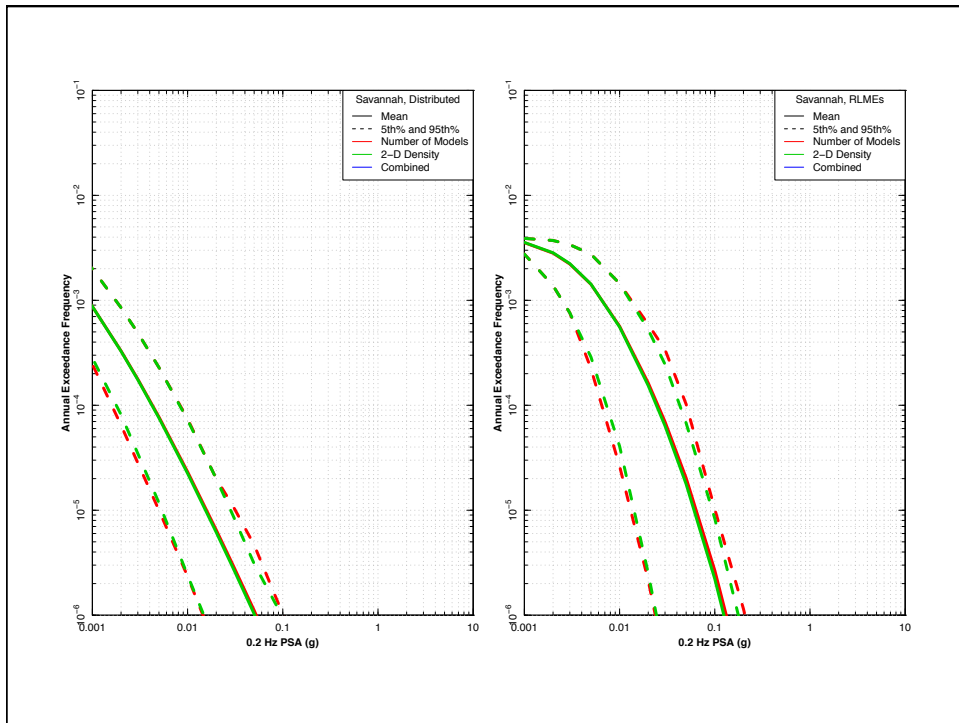
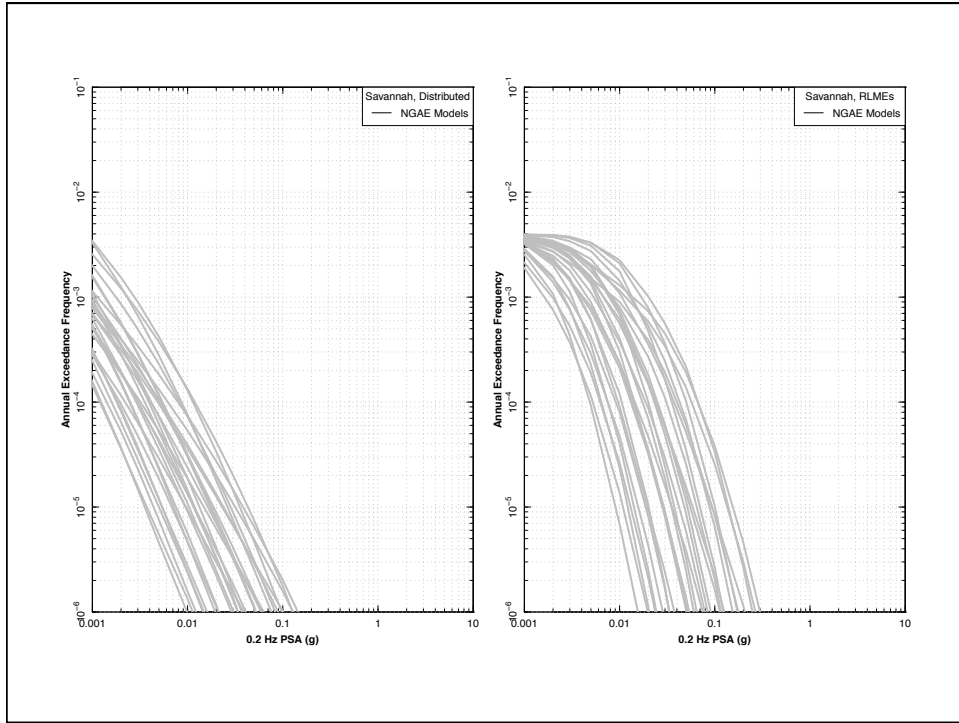


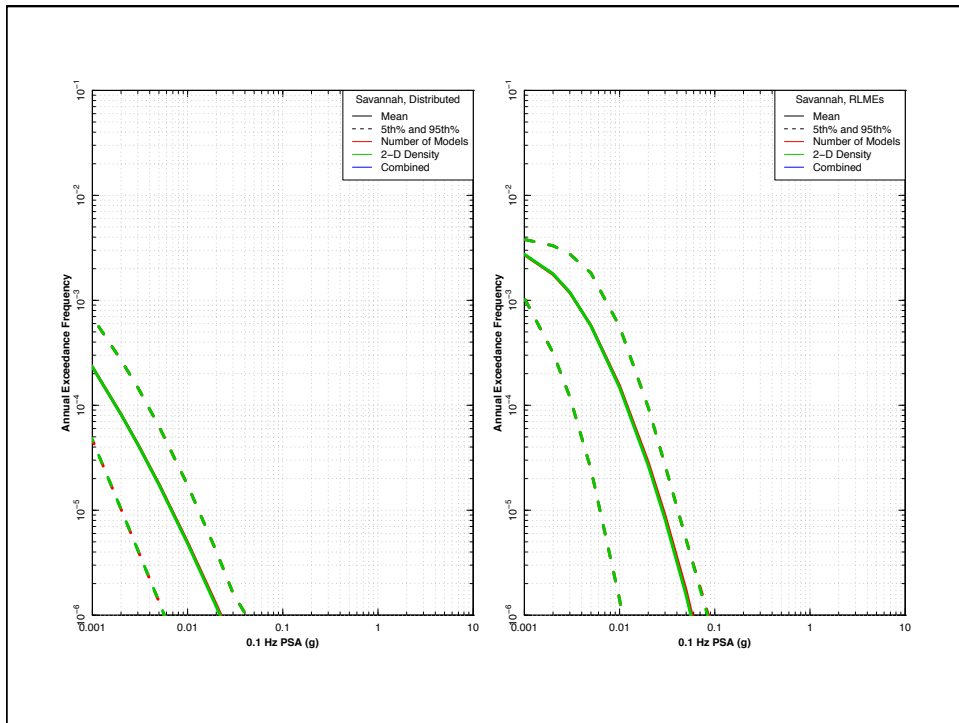
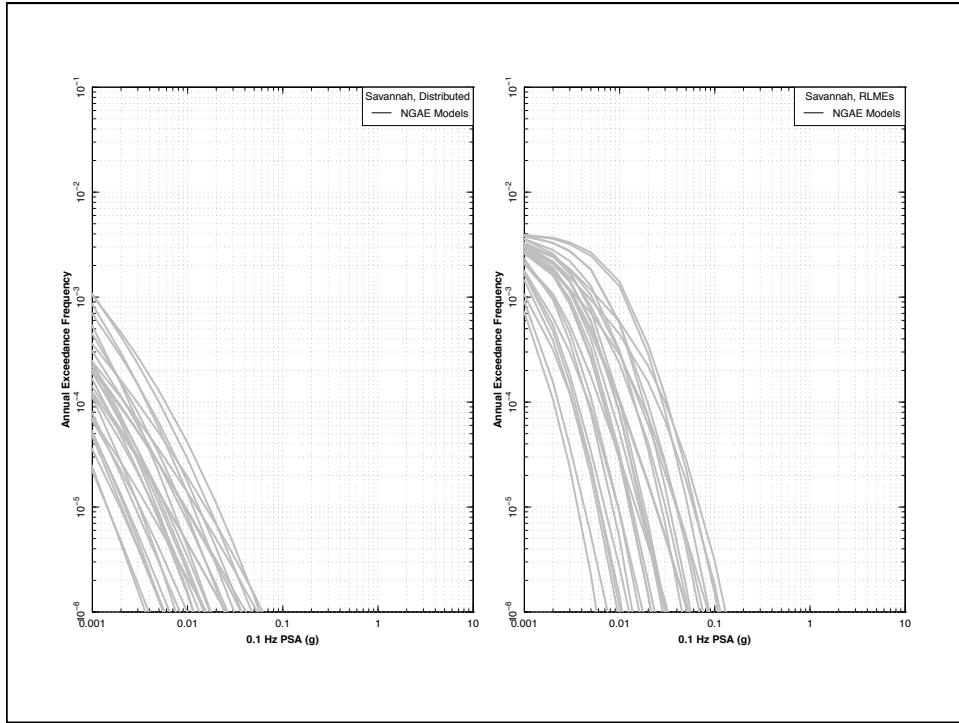


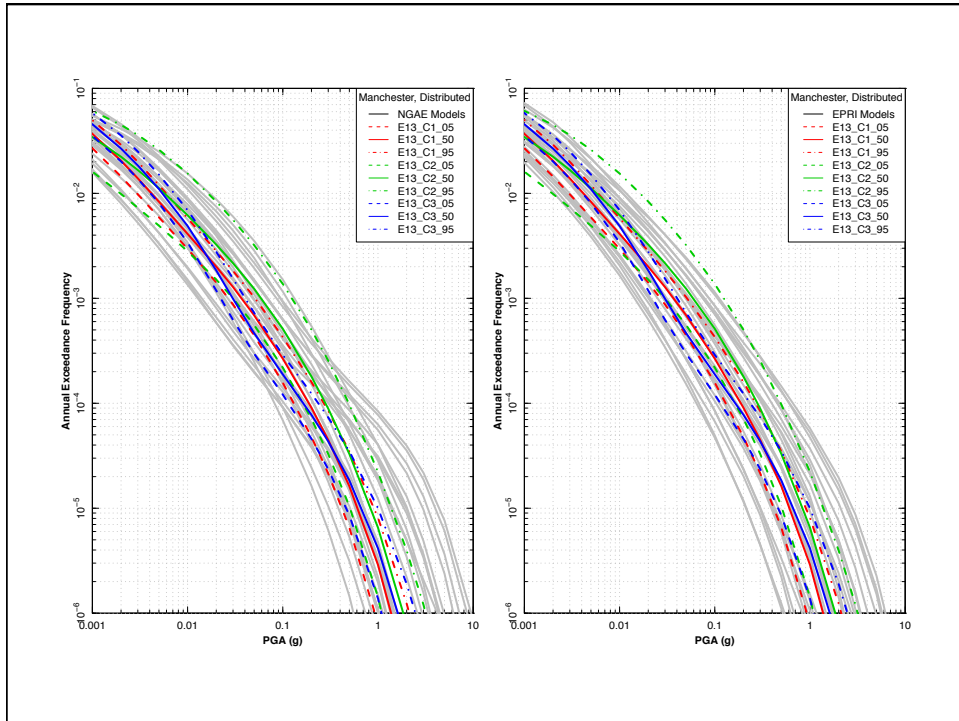
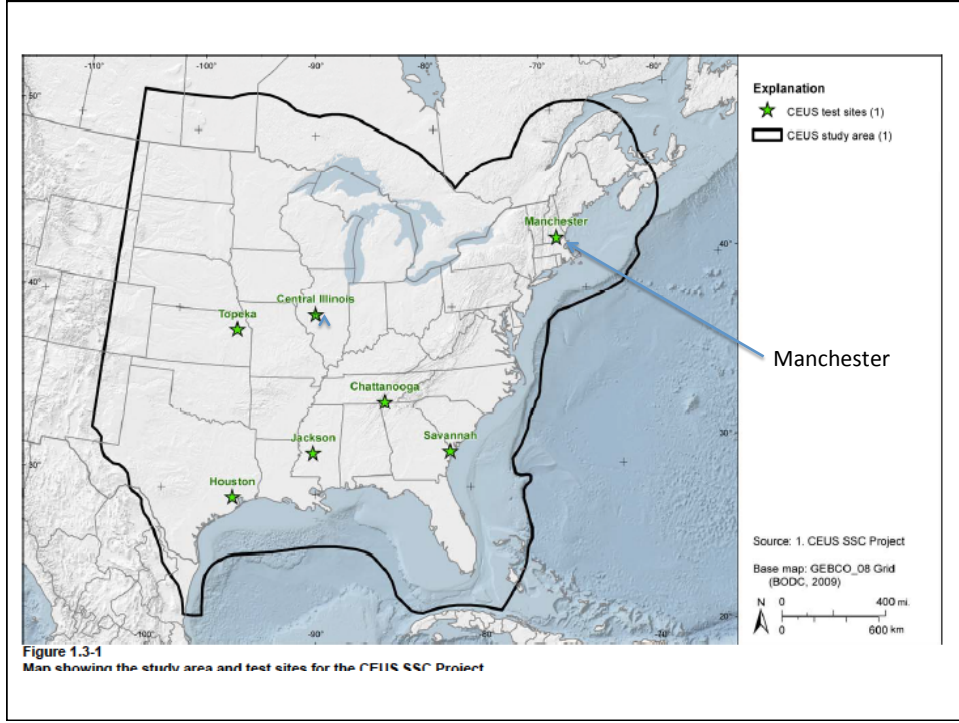


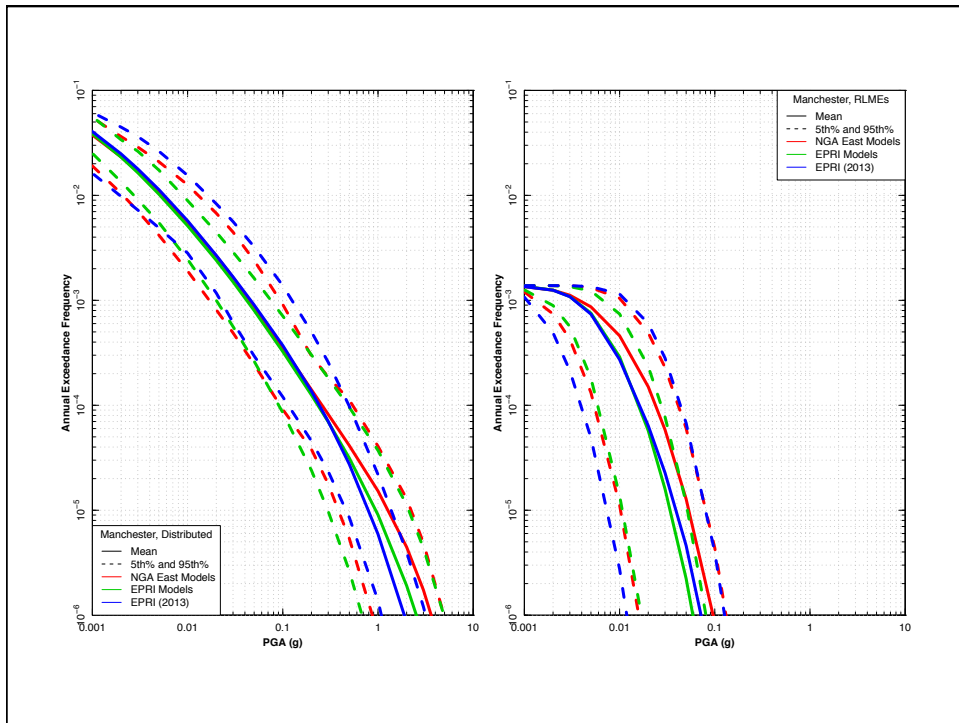
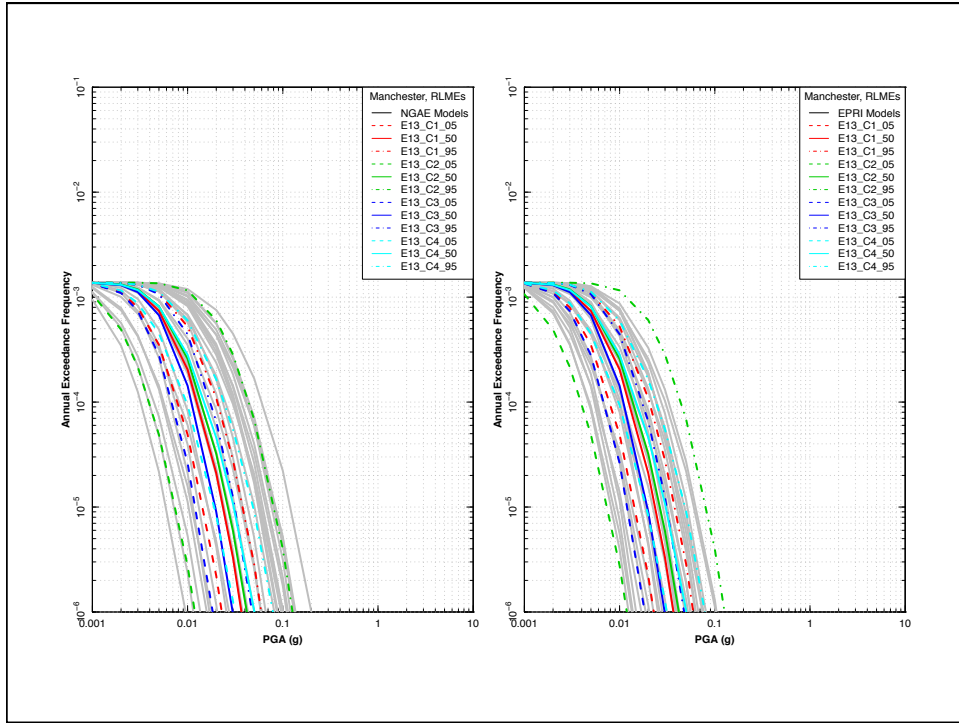


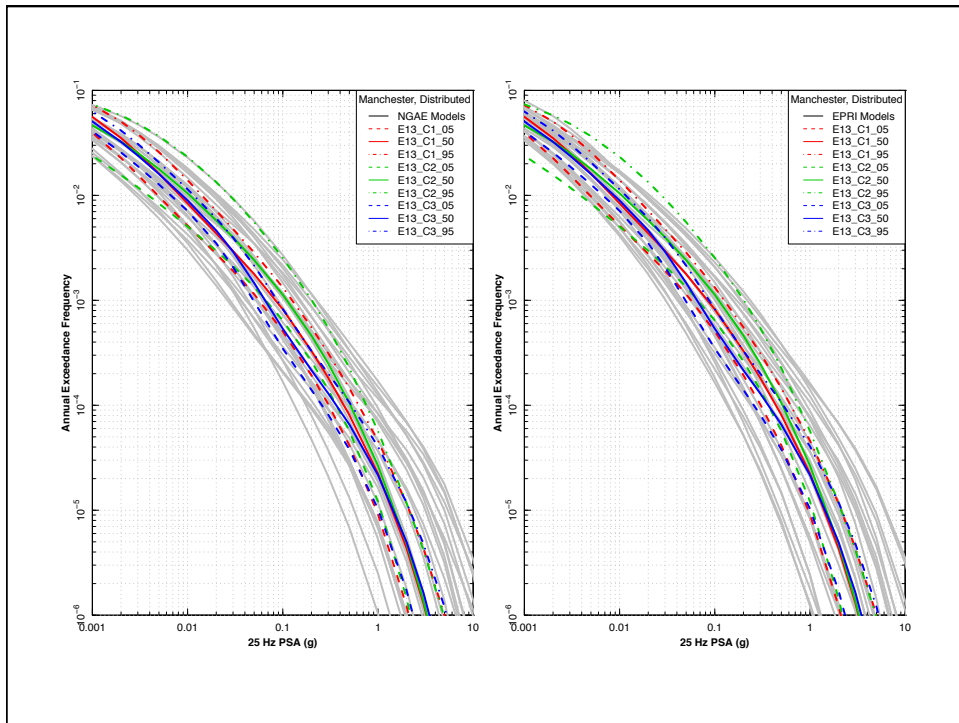
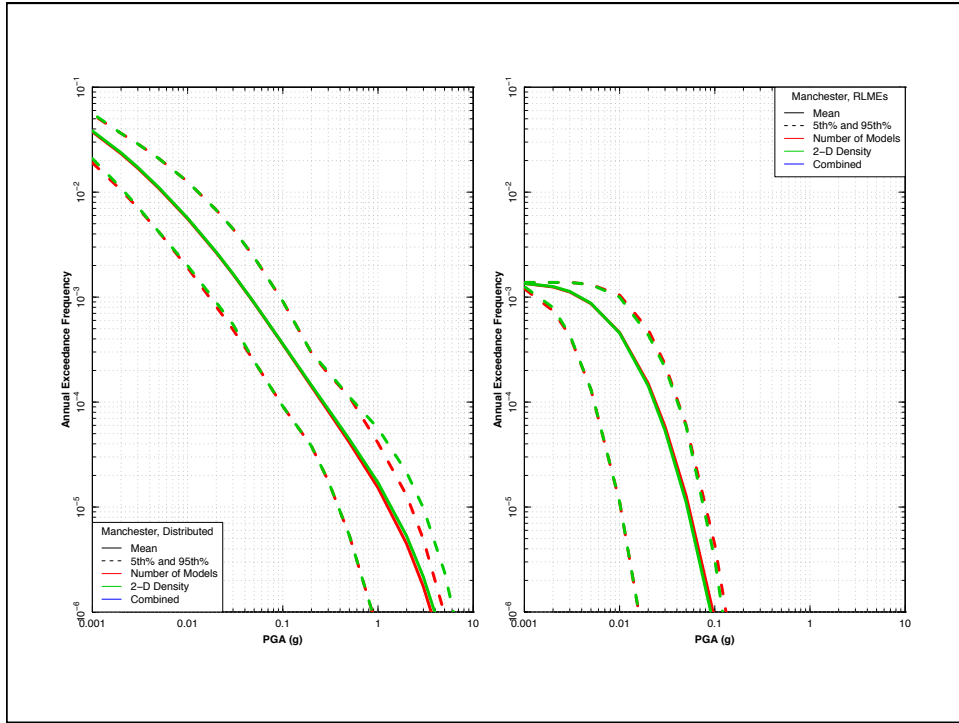


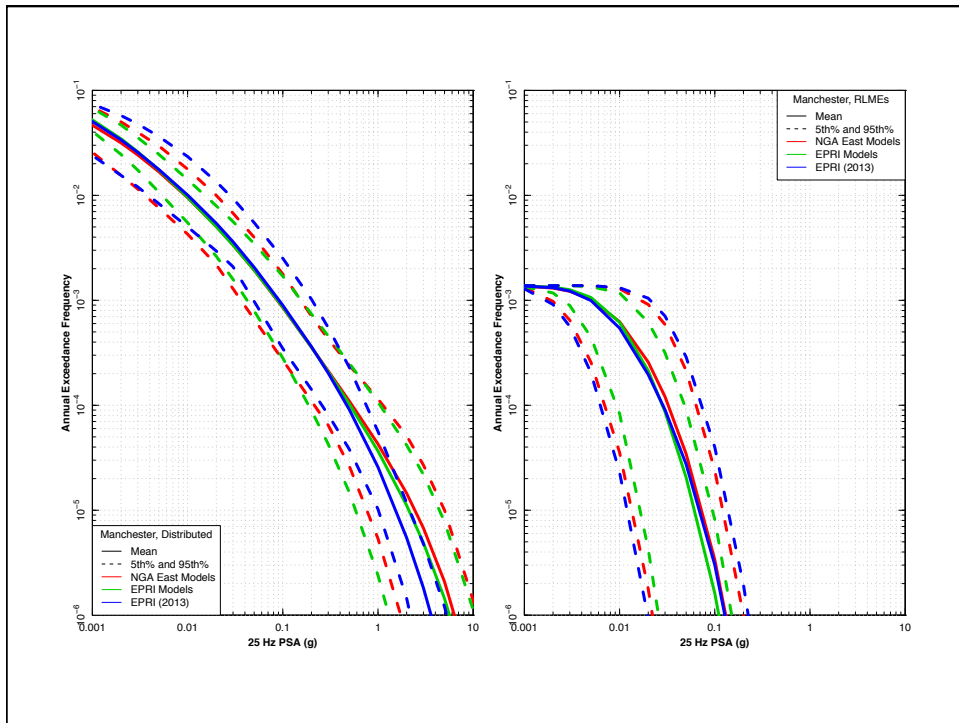
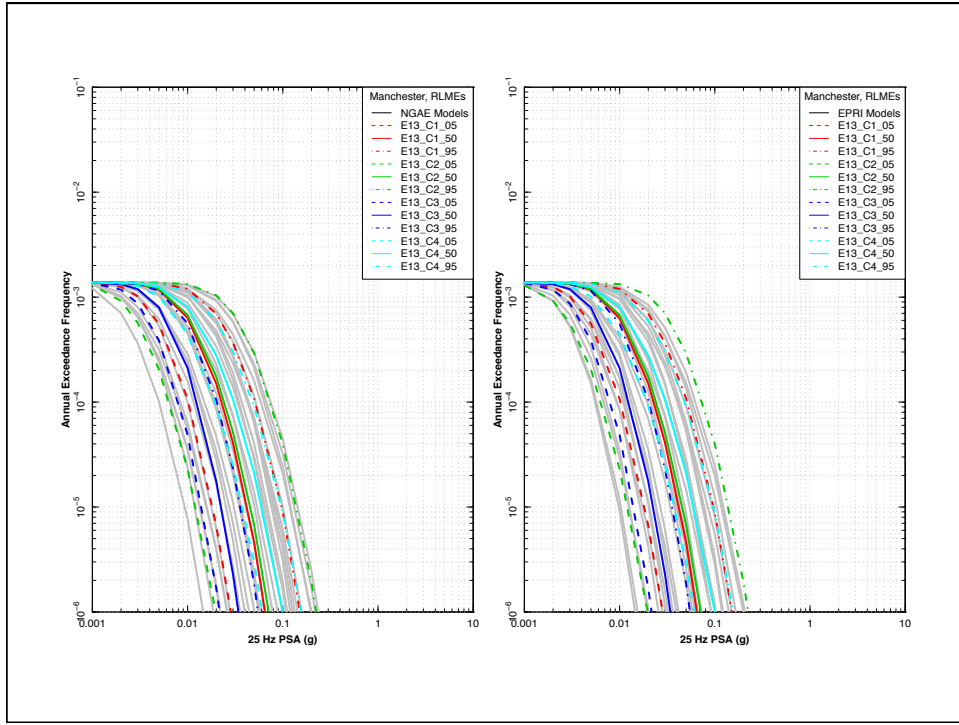


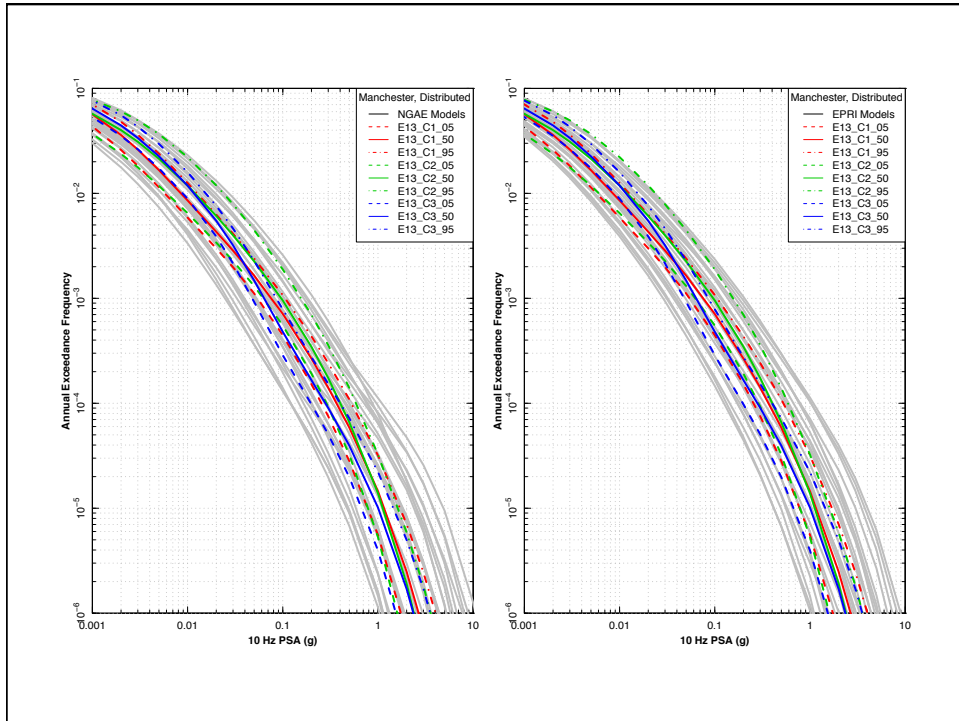
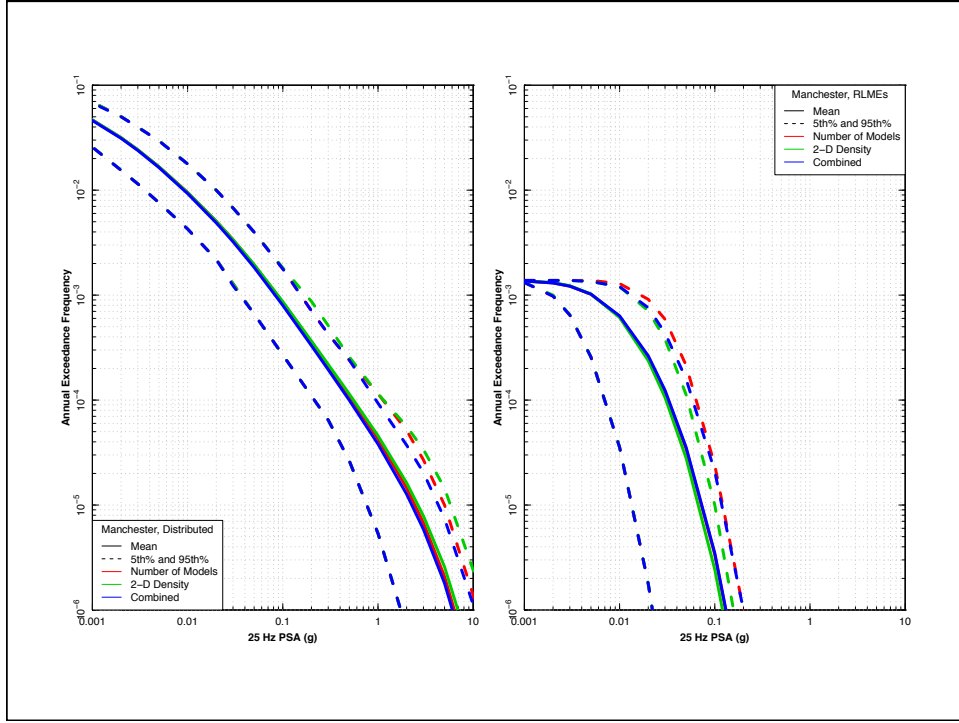


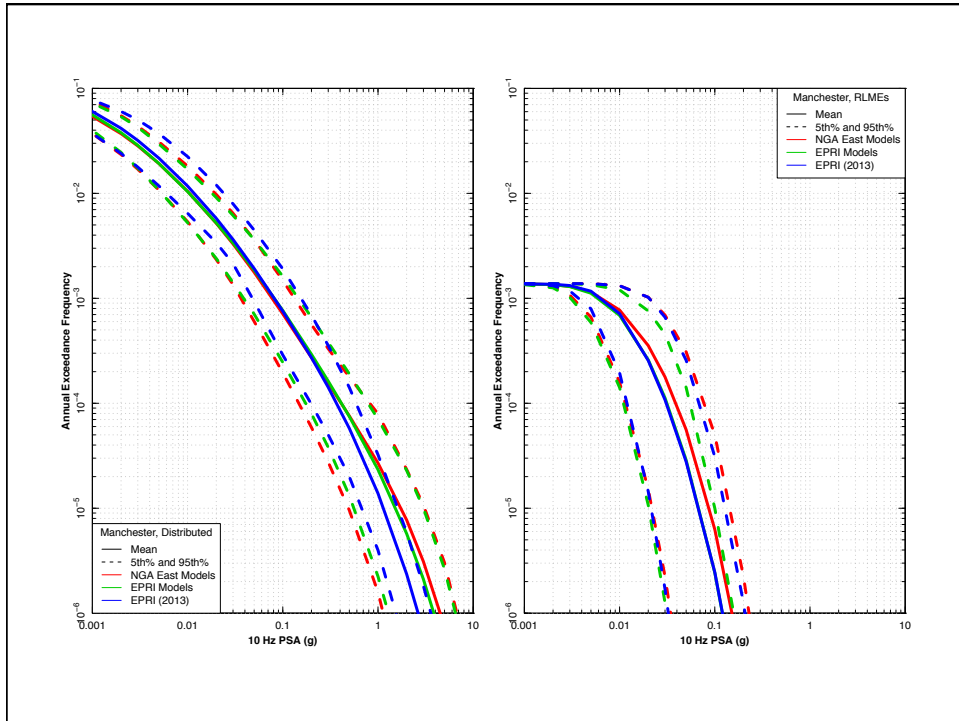
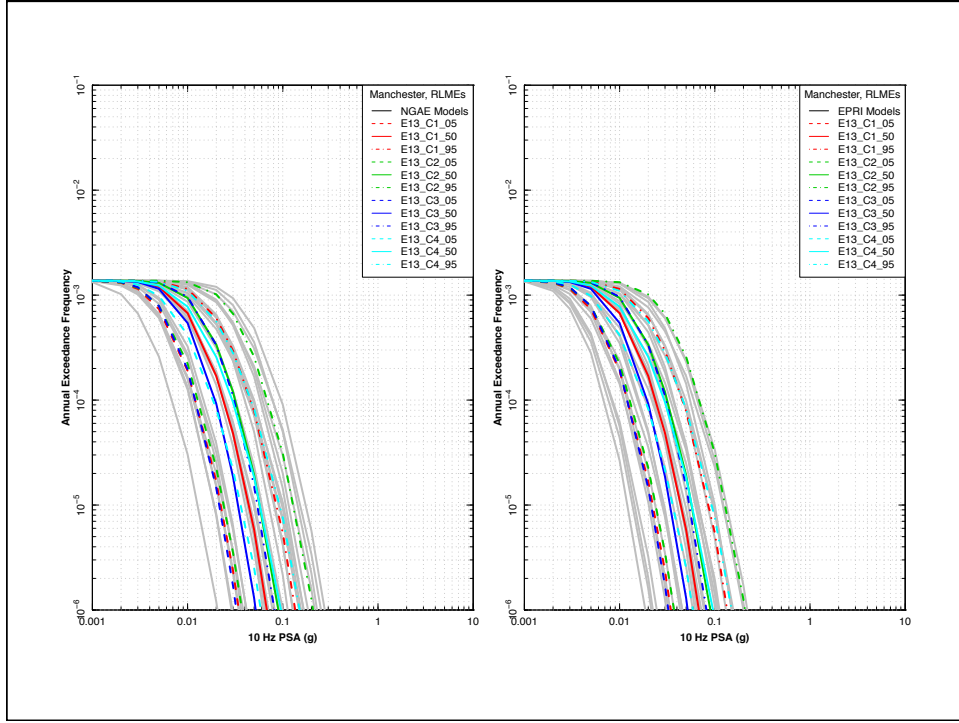


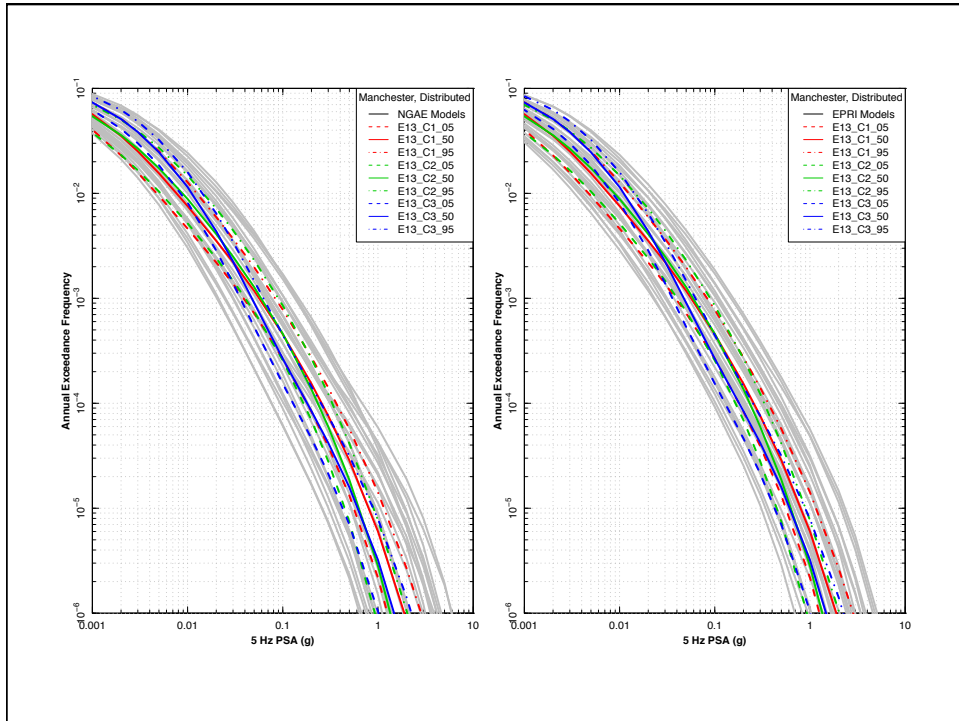
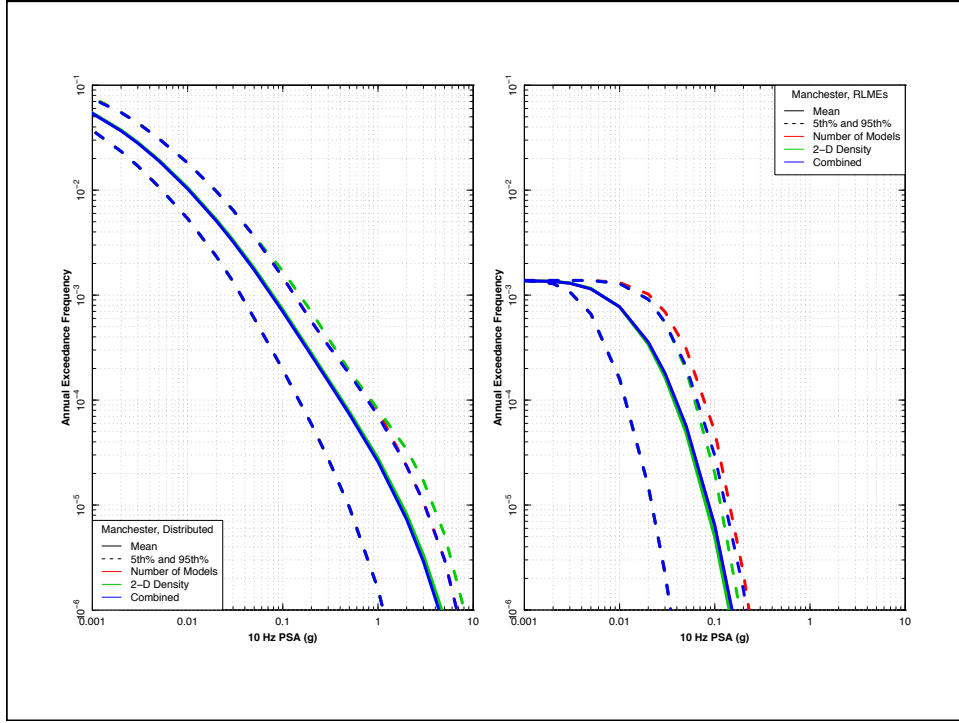


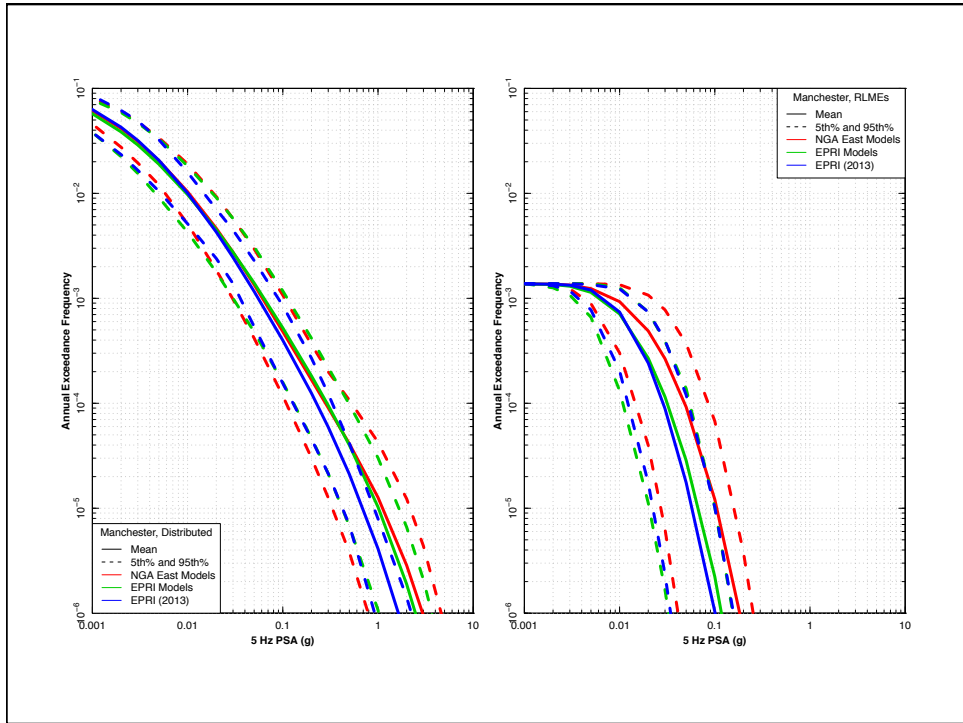
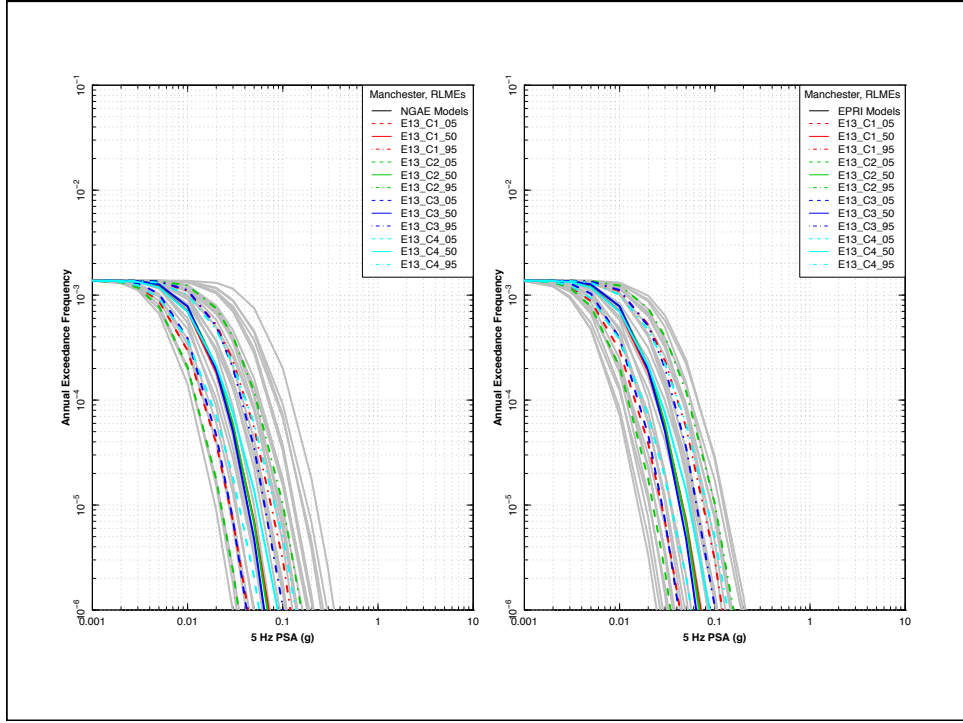


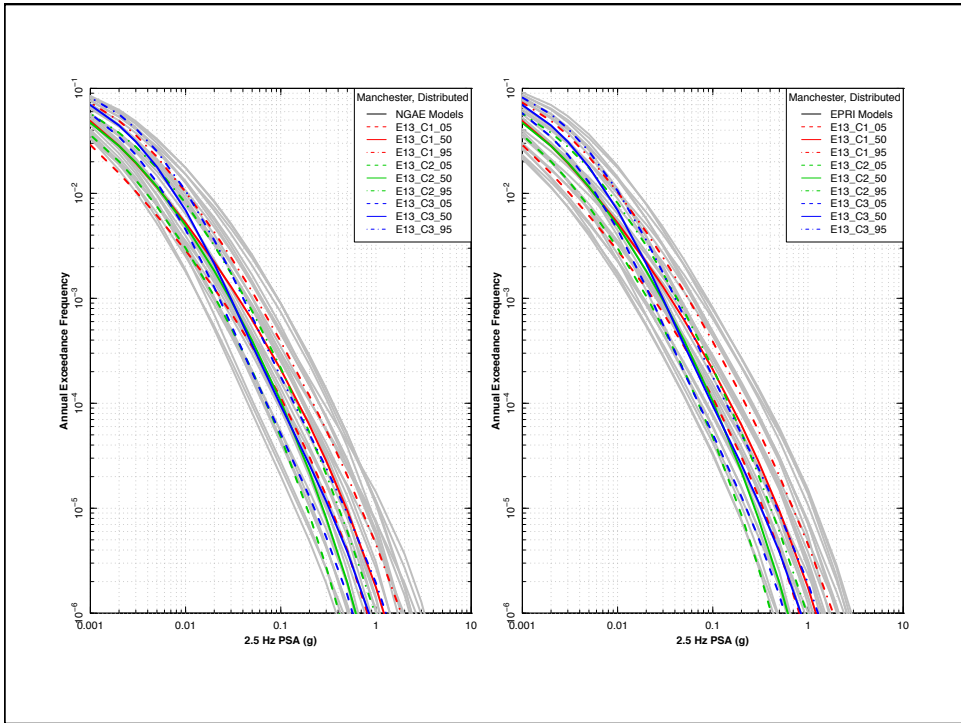
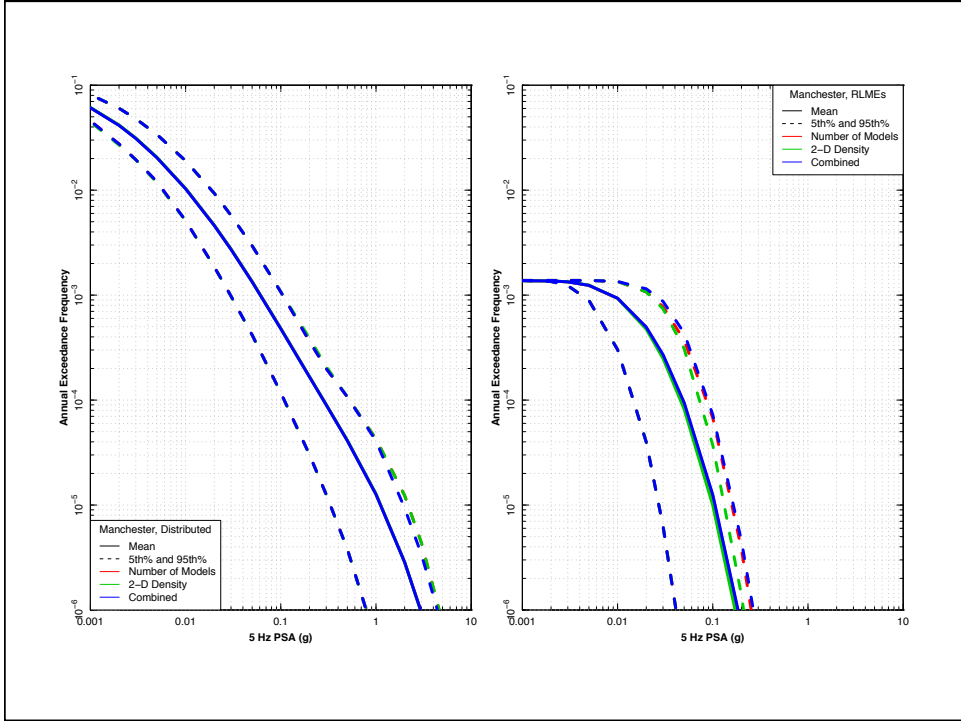


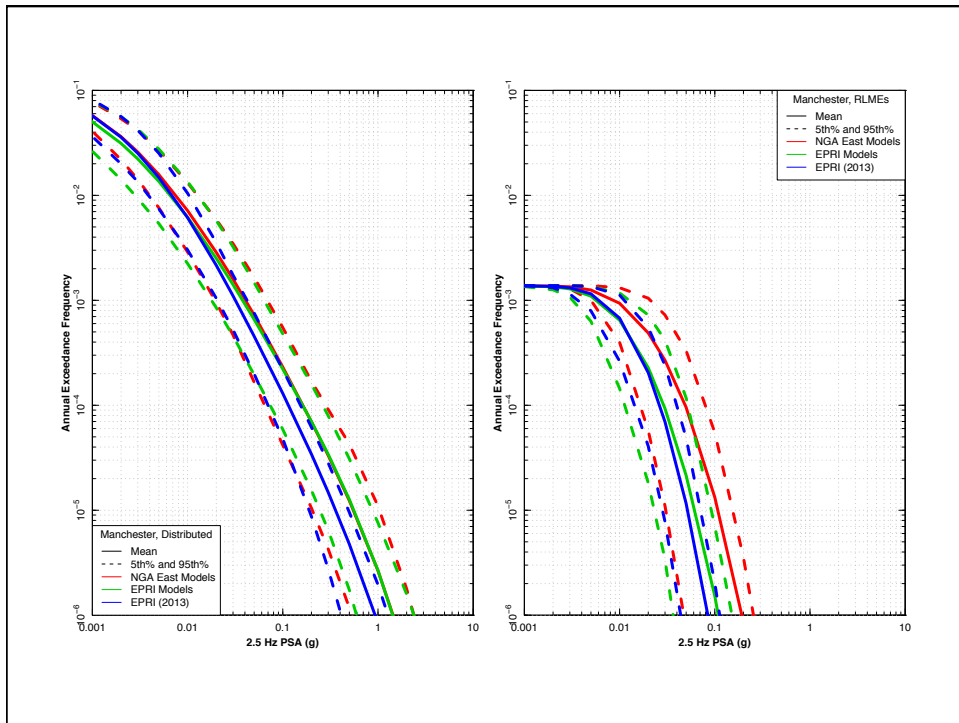
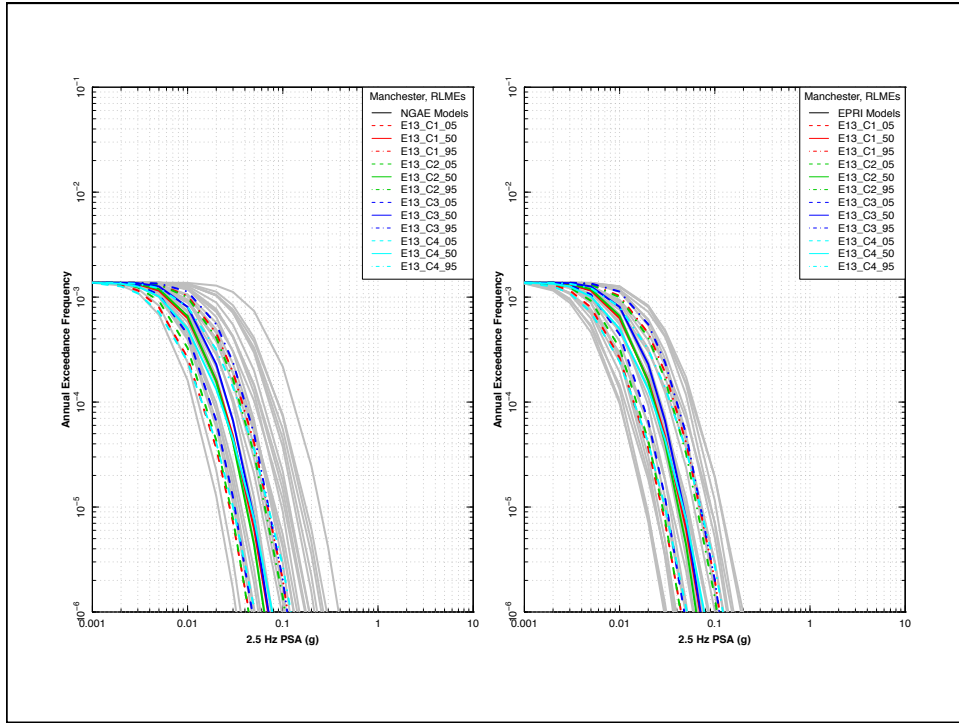


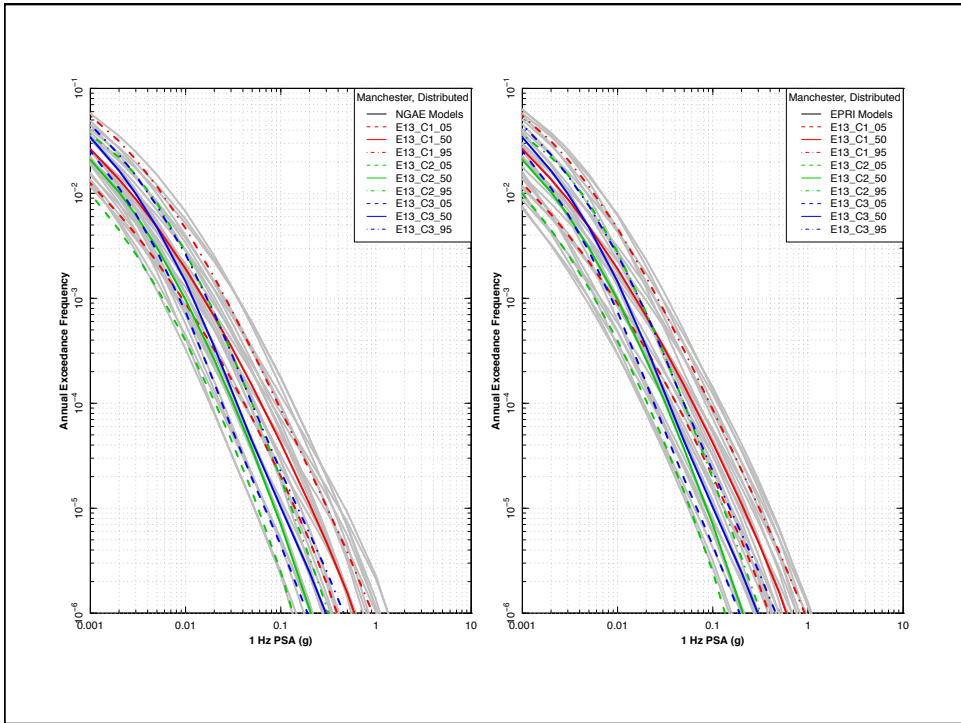
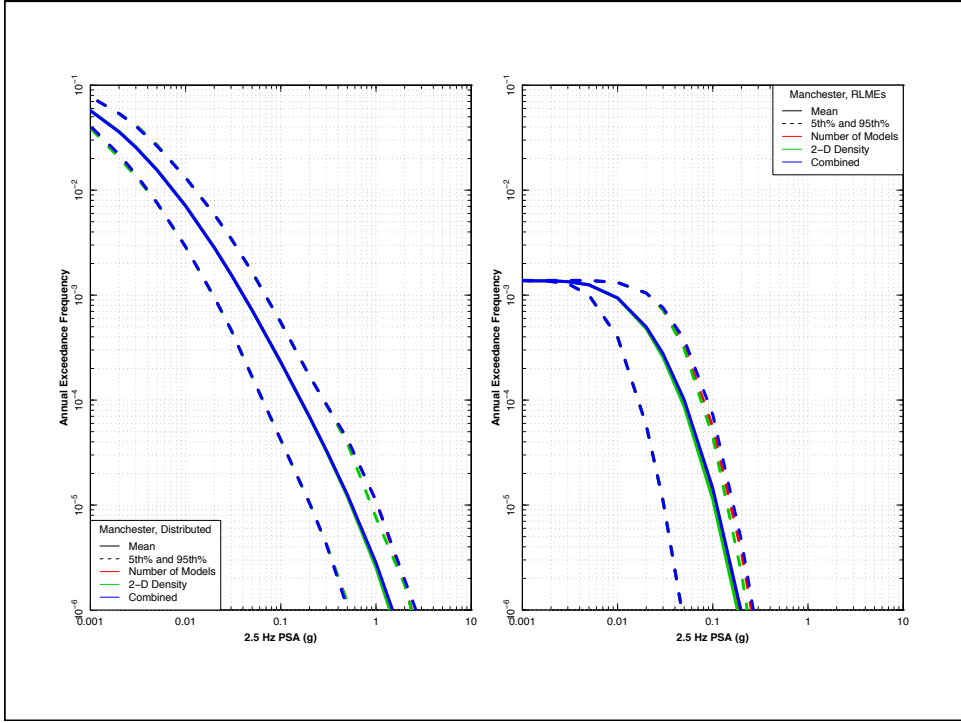


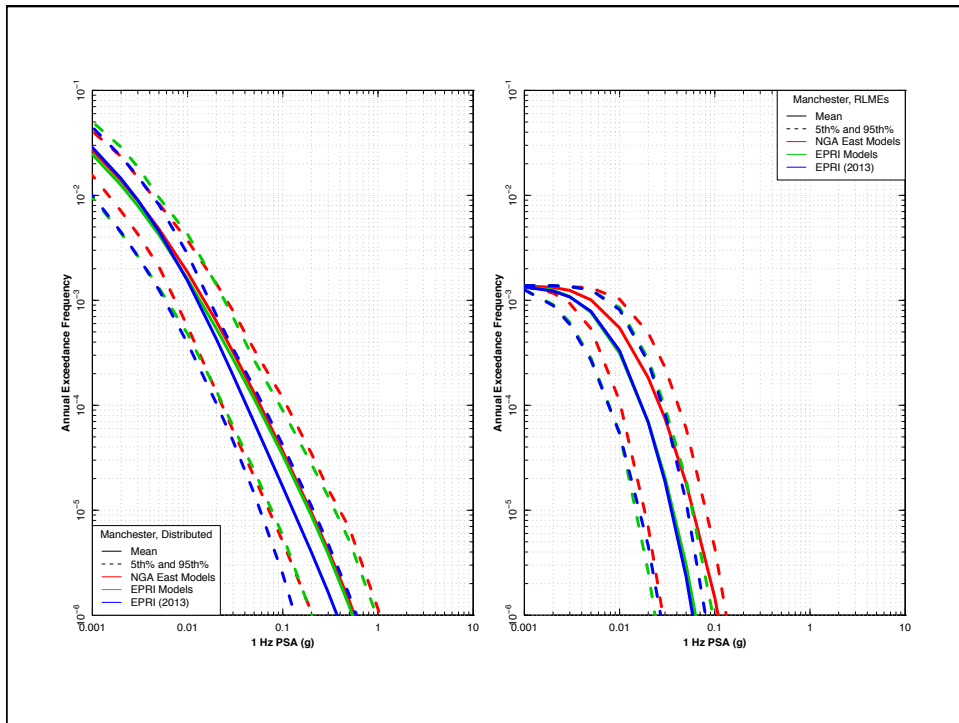
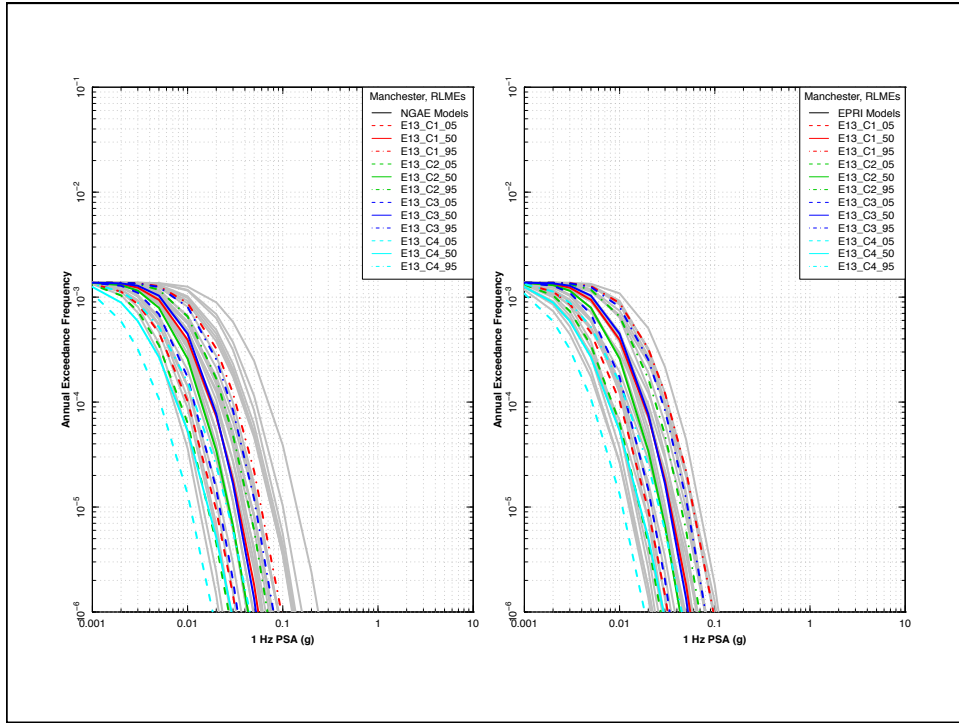


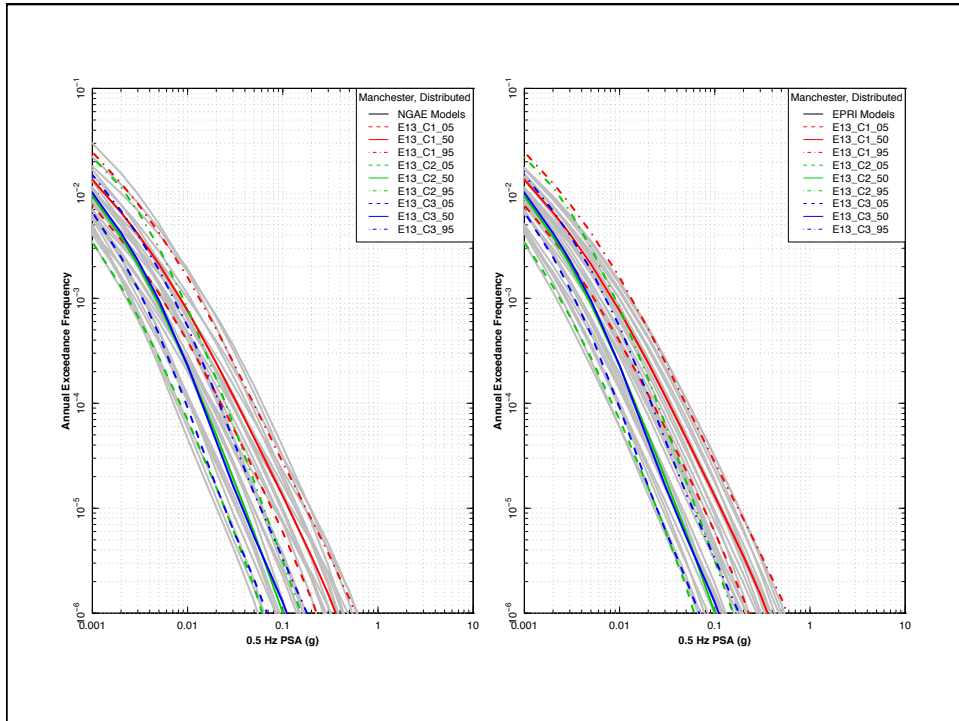
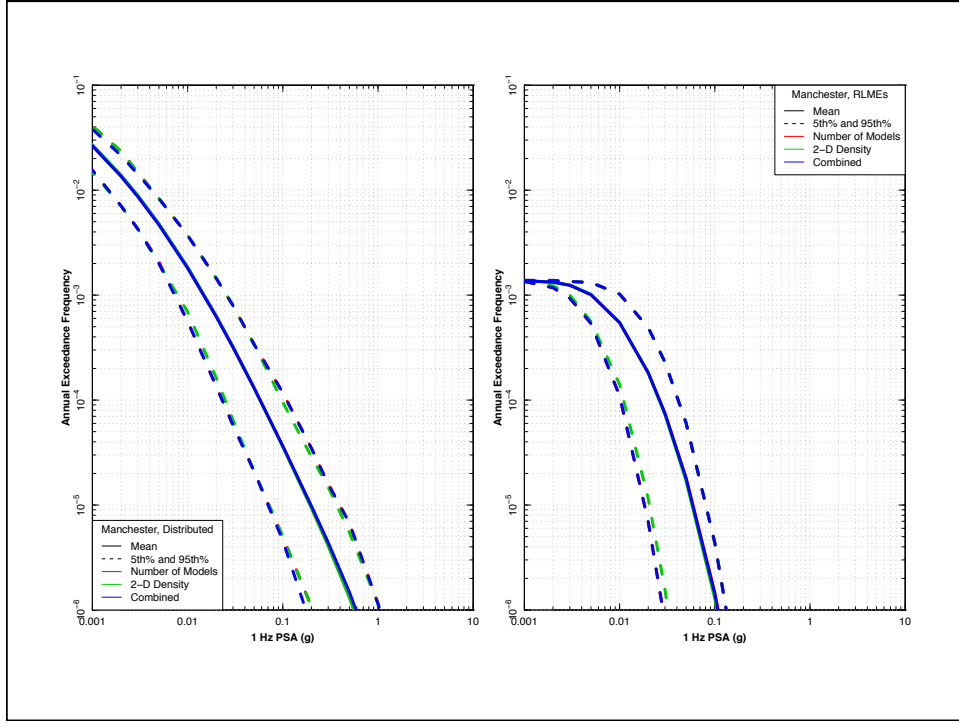


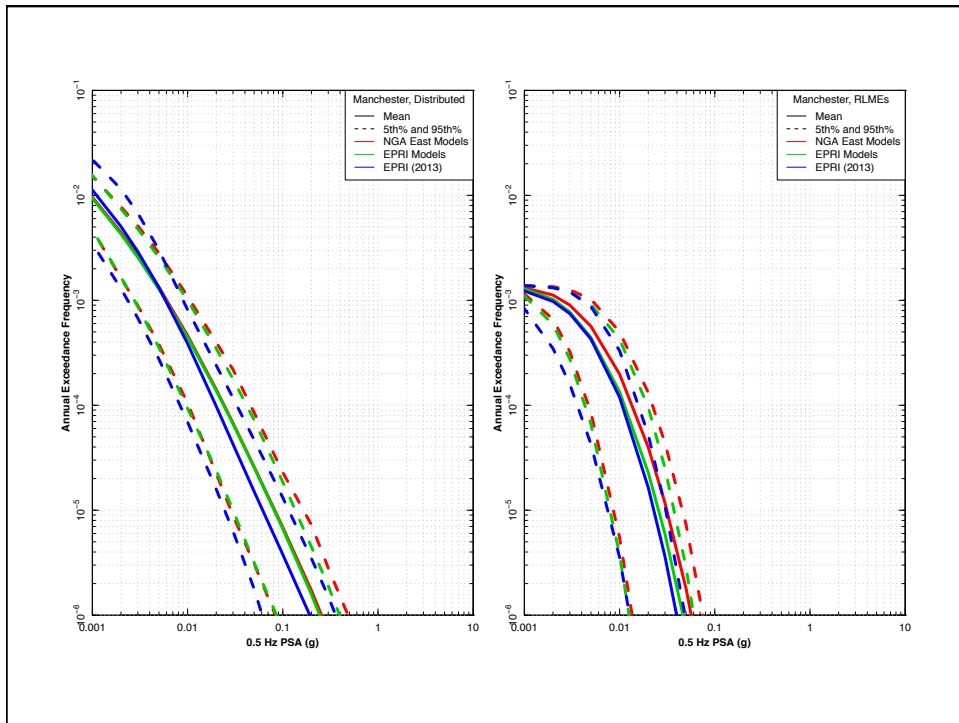
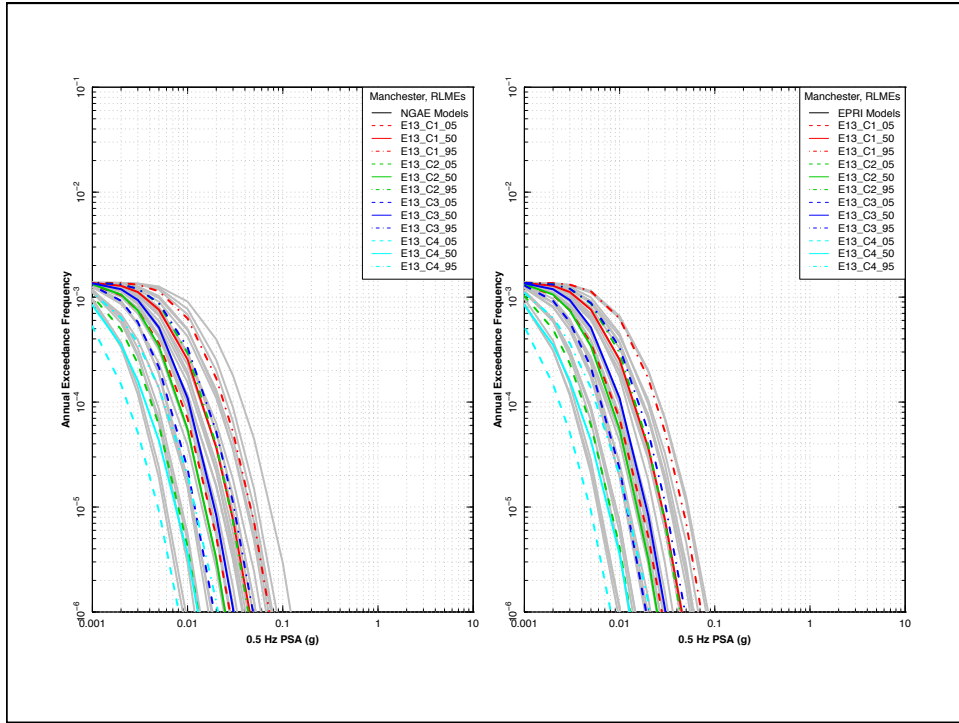


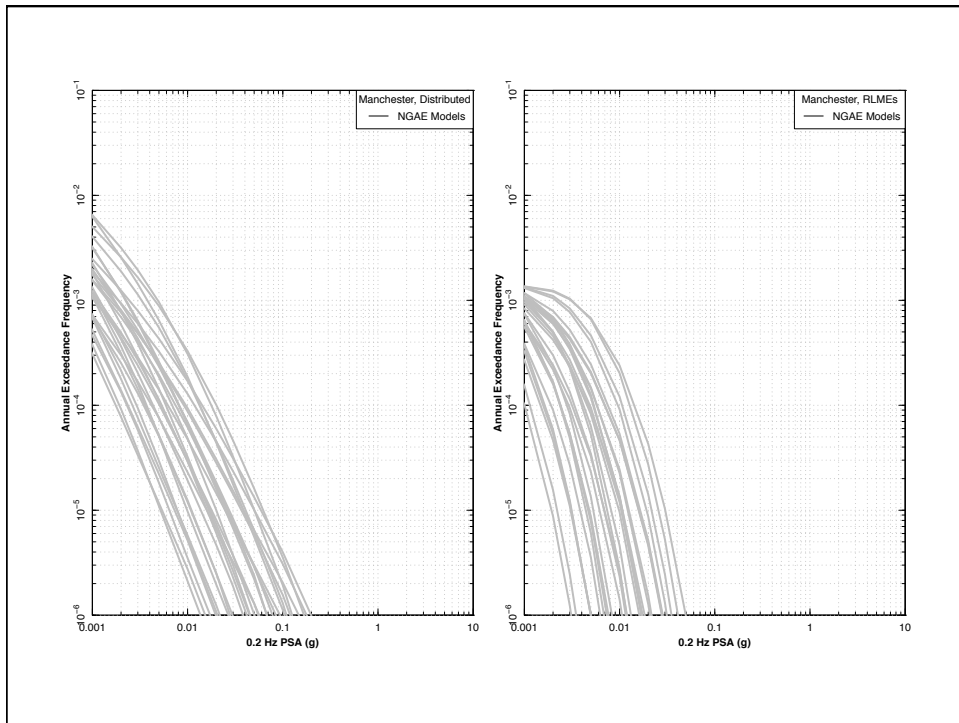
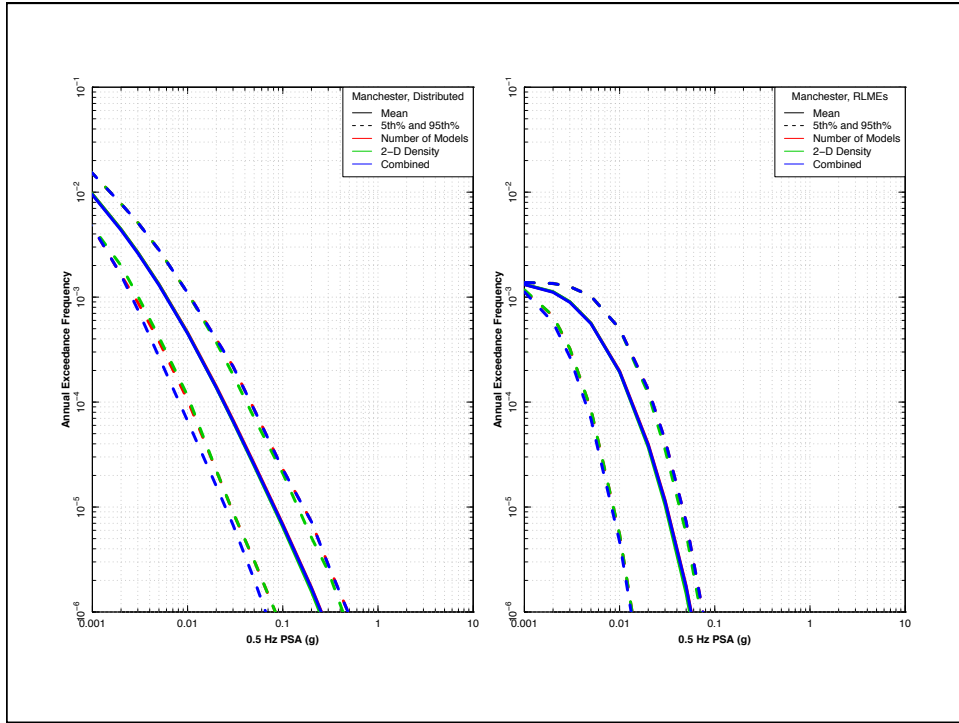


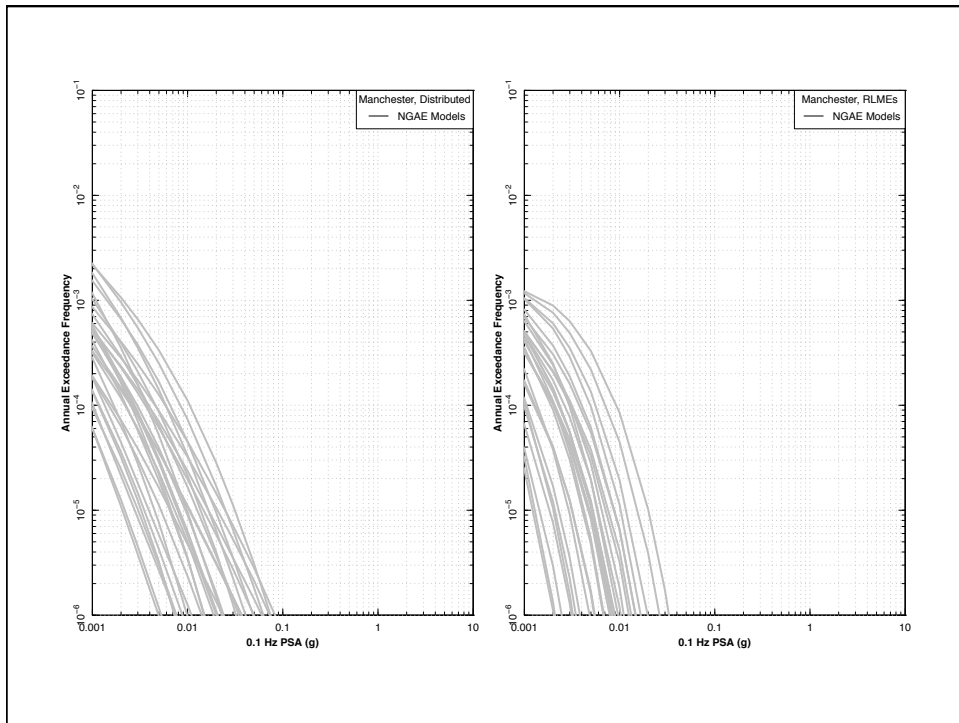
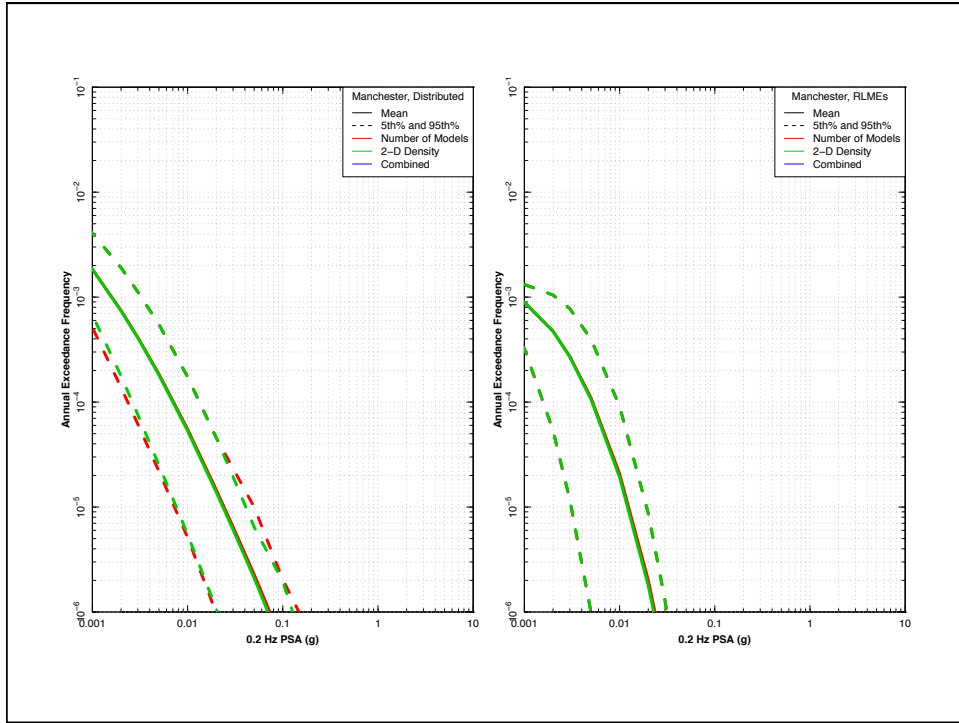












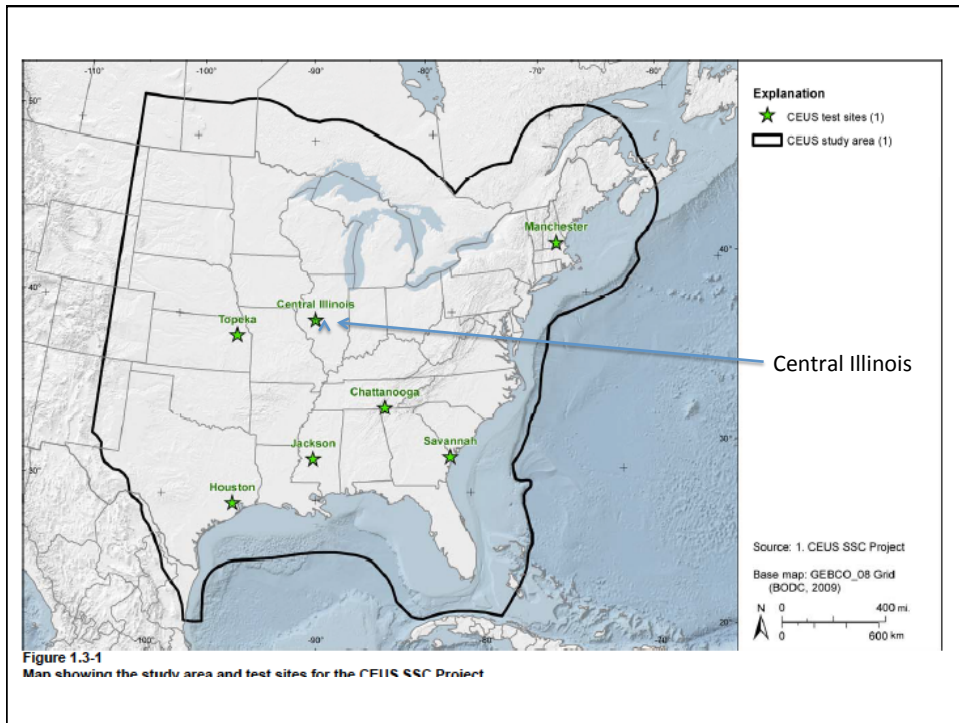
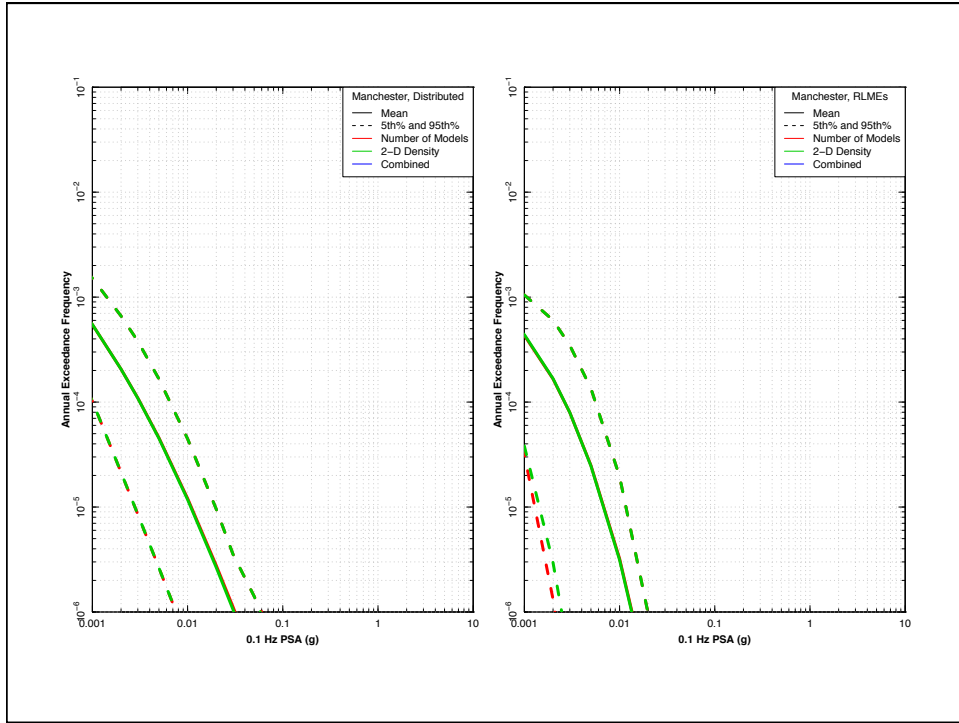


Figure 1.3-1
 Map showing the study area and test sites for the CEUS SSC Project

